U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
PB-283 946

Analysis of GM Fuel Economy Surveys

Aerospace Corp, El Segundo, Calif Mobile Systems Group

Prepared for

Environmental Protection Agency, Ann Arbor, Mich Emission Control Technology Div

Oct 76

TECHNICAL REPORT DATA

(Please read Instructions on the reverse before completing)

1. REPORT NO.
EPA 460/3-76-029

2.

3. RECIPIENT'S ACCESSION NO.
PB283946

4. TITLE AND SUBTITLE
ANALYSIS OF GM FUEL ECONOMY SURVEYS

5. REPORT DATE
15 October 1976

6. PERFORMING ORGANIZATION CODE

7. AUTHOR(S)
Ronald F. Janz

8. PERFORMING ORGANIZATION REPORT NO.
ATR-77(7358-02)-1

9. PERFORMING ORGANIZATION NAME AND ADDRESS
The Mobile Systems Group
Environment and Energy Conservation Division
The Aerospace Corporation
El Segundo, California 90245

10. PROGRAM ELEMENT NO.

11. CONTRACT/GRANT NO.
68-01-0417

12. SPONSORING AGENCY NAME AND ADDRESS
EPA Office of Air and Waste Management
Office of Mobile Source Air Pollution Control
Emission Control Technology Division
Ann Arbor, Michigan 48105

13. TYPE OF REPORT AND PERIOD COVERED
Final

14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES

16. ABSTRACT

Data obtained by General Motors Corporation in three fuel economy surveys of 1975 GM private passenger car owners are analyzed to determine seasonal, topographical, and geographical effects on the fuel economy of in-use vehicles. Data from the GM survey for 1532 cars formed the basis for this study. Additional seasonal, topographical, and geographical data associated with the locations of the owners were acquired from the literature and added to the GM data base. Carline classes are defined that contain cars with the following parameters in common: GM Division, Inertia Weight, CID-BBL, Transmission Type, and Axle Ratio. Within each carline class, harmonic mean fuel economies are computed for groups of cars with extreme ranges in each of eight seasonal, topographical, and geographical parameters. The dependence of fuel economy on these parameters is determined by comparing fuel economies between groups. Sales weighted harmonic mean fuel economies are computed for analogous groups at the division and fleet level.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Automobile Fuel Economy Seasonal, Topographical, and Geographical Effects on Fuel Economy GM Survey Data Correlations	In-Use Vehicle Fuel Economy GM Car Owner Data Harmonic Mean Fuel Economy Calculations	13F 21G

18. DISTRIBUTION STATEMENT
Unlimited

19. SECURITY CLASS *(This Report)*
Unclassified

20. SECURITY CLASS *(This page)*
Unclassified

21. NO. OF PAGES
382

22. PRICE
Pc14 MFA01

EPA Form 2220-1 (9-73)

PB 283 946

Motor Vehicle Emission Lab
LIBRARY

EPA-460/3-76-029
October 1976

ANALYSIS OF GM FUEL ECONOMY SURVEYS

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NATIONAL TECHNICAL
INFORMATION SERVICE
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SPRINGFIELD, VA. 22161

U.S. ENVIRONMENTAL PROTECTION AGENCY
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ANALYSIS OF GM FUEL ECONOMY SURVEYS

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Contract No. 68-01-0417

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Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air and Waste Management
Office of Mobile Source Air Pollution Control
Emission Control Technology Division
Ann Arbor, Michigan 48105

October 1976

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Publication No. EPA-460/3-76-029

FOREWORD

This report, prepared by The Aerospace Corporation for the U.S. Environmental Protection Agency, Emission Control Technology Division, presents the results of an evaluation of seasonal, topographical, and geographical effects on fuel economy of in-use vehicles manufactured by the General Motors Corporation.

The results of the study are presented in five sections. Sections 1 and 2 briefly summarize the study results and approach. A discussion of the data and methods of analysis is included in Sections 3 and 4. Section 5 presents the detailed study results.

ACKNOWLEDGMENT

During the course of this study, Mr. J. Dillard Murrell of the Environmental Protection Agency's Emission Control Technology Division, who served as EPA Project Officer for the study, provided valuable guidance and assistance. His efforts are gratefully acknowledged.

Dr. Ronald F. Janz was principally responsible for the analysis effort reported herein. The following technical personnel of The Aersopace Corporation also made valuable contributions to the analysis performed under this contract:

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SUMMARY

Current Product Engineering, Engineering Staff, General Motors Corporation conducted three fuel economy surveys of 1975 GM private passenger car owners. The objective of these surveys was to determine what kind of fuel economy 1975 GM customers were experiencing. Data from this survey for 1532 cars formed the basis for this study. Additional seasonal, topographical, and geographical data associated with the locations of the owners were acquired from the literature and added to the GM data base. Carline classes were then defined which contained cars with the following parameters in common: GM Division, Inertia Weight, Engine Displacement—Number of Carburetor Barrels (CID-BBL), Transmission Type, and Axle Ratio. Harmonic mean fuel economies were computed for groups of cars within each carline class. These groups were associated with extreme ranges in each of eight seasonal, topographical, and geographical parameters. The dependence of fuel economy on these parameters was determined by comparing fuel economies between groups. Sales weighted harmonic mean fuel economies were computed for analogous groups at the division and fleet level.

Preliminary results indicate an increase in fuel economy with an increase in average miles traveled per day for all carline classes. It was also found that temperature and population (i.e., urban/highway driving conditions) have a lesser influence on fuel economy, but that a larger data base is required in order to properly evaluate this result.

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SECTION 1

INTRODUCTION

The objective of this study was to analyze GM customer fuel economy data for seasonal, topographical, and geographical effects on fuel economy of in-use vehicles. Data which characterize season, topography, and geography (such as temperature or elevation) were hand-transcribed from the literature and incorporated into a GM fuel economy survey data base. While this involved a substantial effort, it was justified on the basis that these data could be used to identify fundamental relationships between fuel economy and key parameters or combinations of parameters.

There are many automobile design parameters which also affect fuel economy. Those which were singled out for this study are as follows: inertia weight, engine displacement (CID), number of carburetor barrels (BBL), transmission type, and axle ratio. There are other design parameters, of course, which also may have an effect on fuel economy such as the number of gears in the transmission, whether or not the car is air-conditioned, and so forth. However, in this study the latter parameters were assumed to have a secondary effect on fuel economy.

In order to separate the effect on fuel economy of the above design parameters from the effect of seasonal, topographical, and geographical parameters, cars of common inertia weight, engine displacement, number of carburetor barrels, transmission type, and axle ratio were grouped into classes. Any change in fuel economy within a class was then attributed to an effect other than a change in automobile design. Harmonic mean fuel economies were computed for subgroups of cars within individual carline classes. A chi-square distributed statistic was used to test the hypothesis that the mean fuel economies for these groups were equal. The test that was used (Appendix C) is asymptotic in nature and is not strictly applicable to the small groups of cars that were analyzed in this study. Therefore, the results of this study should be considered preliminary in nature.

A larger data base is required to substantiate these preliminary results as well as to allow the application of multiple level hypothesis testing. Such testing could be used to distinguish between parameters that affect fuel economy and to determine the relative importance of these parameters as determinants of fuel economy.

SECTION 2

DATA ACQUISITION AND ANALYSIS

The GM data base supplied by the EPA Project Officer consisted of data acquired in three separate surveys: a 1975 Winter Survey consisting of cars with an average initial odometer reading of 2535, a 1975 Spring-Summer Survey consisting of cars with an average initial odometer reading of 2600, and a 1975 Spring-Summer Survey consisting of cars with an average initial odometer reading of 6050. In order to minimize differences in fuel economy resulting from the "green car effect," only data from the first two surveys were used in this analysis. There were a total of 1745 cars in this reduced data set. Some of these cars were eliminated because of missing or erroneous data and because it was not possible to obtain certain seasonal, topographical, or geographical data associated with the locations of some of the car owners. After eliminating these cars, there remained a total of 1532 cars for analysis.

A partial listing of the data contained in the reduced data base is given in Table A-1 of Appendix A. Axle ratio and transmission type have been recoded for the purposes of this study. The codes for Division, Body Type, CID-BBL, Axle Ratio, and Transmission Type are given in Table 2-1.

A list of the data that were added to the data base for the purposes of this study is contained in Table A-2 of Appendix A. The first column of information in this table consists of inertia weights for each car. These weights were obtained from Body Type and Division using Table 2-2.

The "Season" parameter in the second column of Table A-2 is equal to either "S" or "W" depending on whether the data were obtained from the Spring-Summer Survey or the Winter Survey. This parameter is used to determine the weather parameters discussed below.

The third column of this table contains average miles per day (abbreviated AMPD). This value was obtained from the initial and final odometer readings and the dates of the initial and final tank fills.

Table 2-1. GM Data Codes

CODE	DIVISION
1	Chevrolet
2	Pontiac
3	Oldsmobile
4	Buick
6	Cadillac

CODE	BODY TYPE
1	Intermediate
2	Standard
3	Luxury
4	Fleetwood 75
5	Riviera, Toronado, Eldorado
6	Sporty (Camaro, Firebird)
7	Special Intermediate
8	Subcompact
9	Compact
11	Monza, Starfire, Skyhawk

CODE	CID-BBL[a]
2	140-1
3	140-2
5	231-2
6	250-1
7	260-2
8	262-2
9	350-2
10	350-4
11	400-2
12	400-4
13	454-4
14	455-4
15	500-5

CODE	AXLE RATIO
1	2.56
2	2.73
3	2.92, 2.93
4	3.08
5	3.42

CODE	TRANSMISSION TYPE
1	Automatic
2	Manual

[a] Cubic Inch Displacement - Number of Carburetor Barrels

Table 2-2. Inertia Weight – GM Body Type Relationship (1975 Model Year)

	GM Division Code				
GM Body Type Code	1 (Chev)	2 (Pontiac)	3 (Olds)	4 (Buick)	6 (Cadillac)
1. (Intermediate)	4500	4500	4500	4500	----
2. (Standard)	(a)	(a)	(a)	(a)	----
3. (Luxury)	----	----	5500	5500	5500
4. (Fleetwood 75)	----	----	----	----	5500
5. (Riviera, Toronado, Eldorado)	----	----	5500	5000	5500
6. (Camaro, Firebird)	4000	4000	----	----	----
7. (Special Intermed.)	4500	4500	----	----	----
8. (Subcompact)	3000	3000	----	----	----
9. (Compact)	4000	4000	4000	4000	----
11. (Monza, Starfire, Skyhawk)	3500	----	3500	3500	----

[a] Body type includes a range of inertia weights; 5250 assumed for this data group.

The population values in the fourth column of Table A-2 correspond to the city in which the driver resides. These values were obtained from the 1976 Commercial Atlas and Marketing Guide.[1]

The fifth column of Table A-2 contains a code which indicates whether or not the city is a suburb of a larger city (the letter S indicates that it is a suburb). The actual populations of suburbs do not represent the general population density of the area. Therefore, in the statistical analysis which was performed on these data the populations of suburbs were arbitrarily considered to be equal to 100,000.

The sixth column in Table A-2 contains a terrain "index" that is used as a measure of local topography. Values for this index were obtained from The National Atlas of the United States of America.[2] The code that was used is as follows:

Slope

"A" – more than 80 percent of area gently sloping
"B" – 50-80 percent of area gently sloping
"C" – 20-50 percent of area gently sloping
"D" – less than 20 percent of area gently sloping

Local Relief

"1" – 0-100 feet
"2" – 100-300 feet
"3" – 300-500 feet
"4" – 500-1000 feet
"5" – 1000-3000 feet
"6" – over 3000 feet

Due to the limited number of cars available in the data base, only "Slope" was used as an indication of the terrain in the analysis.

The elevation data (feet above sea level) in the seventh column of this table were obtained from the same source as population (see above).

The weather data in the eighth, ninth, tenth, and eleventh columns were obtained from Climatological Data, National Summary.[3] Average values were used for the months of December 1974 or June 1975, depending on the value of the Season parameter discussed above. (The assumption was made that these months characterized the local climate during the duration of the Winter and Spring-Summer surveys respectively, since the ranges in dates between initial mailing of the surveys to General Motors' customers and accepting responses for these surveys were November 1974 through February 10, 1975 and May 1, 1975 through July 31, 1975.) The units for these quantities are as follows: temperature – °C, relative humidity – %, precipitation and snow/ice – mm. (The last quantity was not used in this analysis.)

The last column contains a four-digit model code. The first digit corresponds to General Motors. The second digit corresponds to a specific division of General Motors.* The last two digits correspond to the specific model within this division. The correspondence between this code and car model is given in Table 2-3 along with Body Type. The relationship between the latter quantity and model was used to determine the four-digit model designation listed for each car in Table A-2 (Appendix A). Unfortunately, knowledge of the division and body type does not allow a distinction between Vegas, Vega Wagons, and Monzas, for example. (All have Body Type 8 as indicated in Table 2-3.) Whenever a situation like this occurred, the lowest model number was used. That is, in the above example, all Chevrolets with Body Type 8 were given the code 2402 corresponding to Vegas. This model code was introduced into the data base solely for the purpose of determining total sales of cars in each carline class. (Projected 1975 model year sales data were provided by the EPA Project Officer by model for California and Federal Light Duty Vehicles.) The method which was used to determine total sales for a given class can best be explained by the following example. One of the classes consisted of two models: 2407 and 2412. According to Table 2-3 this class could conceivably contain the following models: Chevelle (Malibu, Laguna); Chevelle Wagon; and Monte Carlo. The total sales for this class

---

*This code was developed in conjunction with other EPA studies. Consequently, the Division Code does not correspond to the one in the GM data base (see Table 2-1).

Table 2-3. Model Codes

Division		Body Type	Model	
Code			Code	
2	Buick	11	01	Skyhawk
		9	02	Apollo
		9	03	Skylark
		1	04	Century/Regal
		1	05	Century Wgn
		2	06	Le Sabre
		3	07	Electra
		2	08	Estate Wgn
		5	09	Riviera
3	Cadillac	--	01	Seville
		3	02	Calais/Deville
		5	03	Eldorado
		3	04	Fleetwood Brougham
		4	05	Fleetwood 75
4	Chevrolet	--	01	Chevette
		8	02	Vega
		8	03	Vega Wgn
		8	04	Monza
		9	05	Nova
		6	06	Camaro
		1	07	Chevelle (Malibu, Laguna)
		1	08	Chevelle Wgn
		2	09	Chevrolet (Caprice, Impala, Bel Air)
		2	10	Chevrolet Wgn
		--	11	Corvette
		7	12	Monte Carlo
5	Oldsmobile	11	01	Starfire
		9	02	Omega
		1	03	Cutlass
		1	04	Cutlass Wgn
		2	05	Delta 88
		3	06	Ninety-Eight
		2	07	Cust. Cruiser Wgn
		5	08	Toronado
6	Pontiac	3	01	Astre
		8	02	Astre Safari
		11	03	Sunbird
		9	04	Ventura
		6	05	Firebird
		1	06	Lemans
		1	07	Lemans Wgn
		7	08	Grand Prix
		2	09	Pontiac (Bonneville, Catalina, Grandville)
		2	10	Pontiac Wgn
		1	11	Grand AM
		1	12	Trans AM

was assumed to be equal to the sum of the sales for these models including both California and Federal Light Duty Vehicles. The sales data that were used in this analysis are given in Table 2-4. As implied by this table, one additional complication occurred with respect to the treatment of the sales data, that is: some of the carline classes contained identical models. For the purpose of computing sales weighted harmonic mean fuel economy (see Appendix C), it was therefore necessary to combine these carline classes into single classes and associate a single sales value (Table 2-4) with each of the combined classes.

Table 2-4. Projected 1975 Model Year Sales Data (from EPA Certification Test Data Base – California and Federal Light Duty Vehicles)

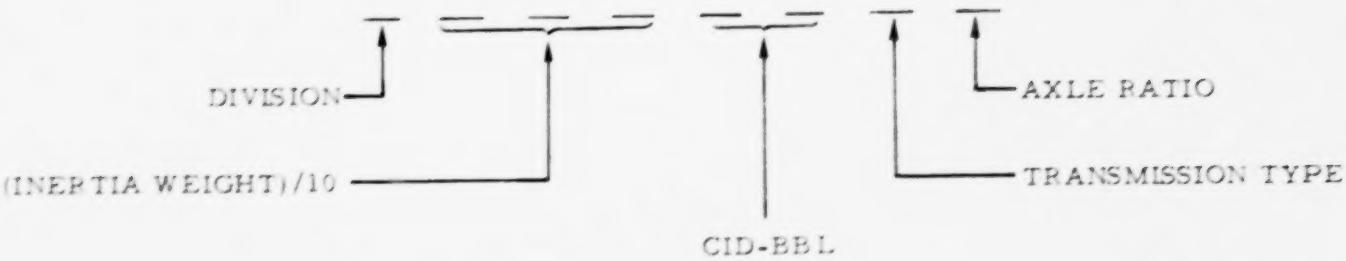
Number	Class I. D.[a]	Class Sales, %[b]	Division Sales, %[b]	Fleet Sales, %[b]
1	13000313	7.13		
2	13000323			
3	14000612	8.99		
4	14000912			
5	14500912	17.43		
6	15250914	19.77	53.32	
7	15251212			
8	23000313	3.31		
9	23000323			
10	24000911	2.40		
11	24500911	6.58		
12	24501211			
13	25251111	4.79	17.08	
14	25251212			
15	34000711	(c)		
16	34501011	9.00		
17	35251012	3.19		
18	35501411	2.40		
19	35501412	0.79	15.38	
20	44500912	5.49		
21	45001413	0.20		
22	45251014	4.64		
23	45501412	3.89	14.22	
				100.00

[a] Refer to Table 2-5 for an explanation of the Class I. D.

[b] For those models that were represented in each carline class.

[c] Data not available; zero value adopted for sales summation.

Table 2-5. Carline Class Identification


DIVISION
(INERTIA WEIGHT)/10
CID-BBL
TRANSMISSION TYPE
AXLE RATIO

Example

13000313

This is a Chevrolet which weighs 3000 pounds, has a 140 cubic inch displacement engine, a 2 barrel carburetor, automatic transmission, and an axle ratio equal to 2.92[a]

---

[a] Refer to Table 2-1.

SECTION 3

METHODS

The dependence of fuel economy, that is, miles per gallon (mpg) on eight seasonal, topographical, and geographical parameters was investigated in this study. The method utilized for establishing this dependence involved the following steps:

a. Definition of a Carline Class. Carline classes were initially defined so that the dependence of fuel economy on seasonal, topographical, and geographical effects could be separated from the dependence of fuel economy on the design of the car. Five parameters were used to define a carline class: (1) Division of General Motors, (2) Inertia Weight, (3) Engine-Carburetion Design (CID-BBL), (4) Transmission Type (Manual versus Automatic), and (5) Axle Ratio (one of five values).

b. Choice of Minimum Cars per Class. It was decided to consider only carline classes with at least 20 cars. There were three considerations that suggested this would be a reasonable number of cars per class:

   1. No fewer than five cars could be used in a given group within a carline class to compute a harmonic mean fuel economy (see Appendix C) and determine statistically whether this mean value was significantly different from another harmonic mean fuel economy.

   2. A sufficient number of cars per class would be required so that two groups of cars, containing at least five cars each, could be identified in such a manner that the ranges in a given parameter associated with each group did not overlap. This criteria would necessarily apply to all eight parameters for each class.

   3. As many cars as possible in the data base would be included in the study.

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The first two considerations clearly suggest large classes, while the third consideration suggests small classes. A value of 20 cars per class was chosen as a reasonable compromise.

c. Determination of Carline Classes. A computer program was written which searched the data base for combinations of the five parameters (which define a carline class) that were common to at least 20 cars. The results of this search are shown in Table 3-1. As indicated in this table, 24 classes were found that satisfied this criteria. These 24 carline classes include 69 percent of the cars in the data base.

d. Determination of Carline Class Harmonic Mean Fuel Economies. A computer program was written that performs the following computations: for each class of cars it determines N number of cars which are associated with extreme values of each of the eight seasonal, topographical, and geographical parameters. (For example, with N=5, the program would identify those cars associated with the five highest and five lowest values of each parameter in each class.) The program then computes harmonic mean fuel economies for each grouping of N cars. Sales weighted harmonic mean fuel economies (see Appendix C) were not computed at a carline class level since frequently the same models were not present in the extreme parameter ranges. Under these circumstances, differences in sales weighted fuel economies would be, at least partially, the result of differences in model mix rather than the parameter under investigation.

e. Determination of Division and Fleet Sales Weighted Harmonic Mean Fuel Economies. Sales weighted harmonic mean fuel economies were computed at both the division* and fleet level. In order to assure that each carline class contained at least three cars in the extreme parameter ranges at the division level, it was necessary to increase the number of cars in each extreme to as many as 104. A corresponding analysis at the fleet level indicated that 479 cars would be required so that all 24 carline classes contained at least three cars in each extreme parameter range.

---

*This was not done for the Cadillac Division since only one carline class was available for that division.

Table 3-1. Carline Classes That Contain at Least 20 Cars

CLASS CODE	NUMBER OF CARS
13000313	26
13000323	22
14000612	32
14000912	40
14500912	77
15250914	37
15251212	25
23000313	34
23000323	25
24000911	48
24500911	44
24501211	49
25251111	35
25251212	22
34000711	30
34501011	35
35251012	59
35501411	59
35501412	51
44500912	42
45001413	42
45251014	70
45501412	74
65501512	83

The sales weighted values presented should be interpreted with caution since there were generally an insufficient number of carline classes to represent the divisions adequately.

f. Determination of the Test Statistic for Evaluating Differences in Fuel Economy. It can be shown that the "Test Statistic" denoted "G" in Appendix C is distributed as a chi-square with α level of confidence and 1 degree of freedom. For $\alpha = 0.95$, $y^2 = 3.84146$. If G exceeds this value, the hypothesis that two harmonic mean fuel economies under investigation are the same is rejected at a 95-percent confidence level.

Values for this statistic were computed for each pair of mean fuel economies for each of the seasonal, topographical, and geographical parameters for each carline class.

SECTION 4

RESULTS

4.1 CARLINE CLASS HARMONIC MEAN FUEL ECONOMY COMPARISONS

The main results of this study are displayed in Tables 4-1 and 4-2 for N=5 and N=10 respectively. An asterisk next to the "Test Statistic" is used to flag significant differences between mean fuel economies. Note that for some of these carline classes the upper bound in AMPD (average miles per day) is quite large. At first it was assumed that this was due to erroneous data that should be deleted from the data base. However, in all cases it was found that these large values occurred over relatively short periods of time, indicating long trips. The data were therefore assumed to be accurate. Note also that the lower bound on population (Range 2) is frequently equal to 100,000. This occurs because of the suburbs in the data base that are all assigned this population.

Comparing Table 4-1 with Table 4-2, it is evident that, while the mean fuel economies depend to a certain extent on the number of cars that are used in the extreme parameter ranges, those mean fuel economies which differ significantly with five cars in the extreme parameter ranges generally differ significantly with ten cars in the extreme parameter ranges as well. Consequently, the discussion that follows will be confined to Table 4-2. As indicated in this table, it was found that fuel economy increases significantly with increasing AMPD for all 24 carline classes. While this trend in the data was anticipated, it was not expected to dominate generally over other factors that are known to affect fuel economy also. (See discussion below.)

Occasional differences in fuel economy with respect to elevation, precipitation, relative humidity, terrain (local slope), and zip code were detected. For example, consider Class 24500911 which exhibits a difference

Table 4-1. GM Fuel Economy Study
Harmonic Mean Fuel Economy Comparisons (N = 5)

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```
DATE       81776
SALES WEIGHTED       NO
NUMBER OF CARS IN PARAMETER RANGE 1      5
NUMBER OF CARS IN PARAMETER RANGE 2      5
CRITICAL VALUE OF TEST STATISTIC AT .05 SIGNIFICANCE   LEVEL  =     3.84146

   CLASS       PARAMETER            RANGE1                       RANGE2              MEAN MPG1  MEAN MPG2 TEST STATISTIC

 13000313        ZIPCODE (      2828,       13205) (       92337,      99109)        19.4156     19.8638            .0575
             POPULATION (       120,        2102) (      216000,    3000000)        19.9634     20.4145            .6706
                  SLOPE (        A1,          B2) (          C3,         C4)        19.8636     19.1712            .3376
              ELEVATION (        25,         140) (         938,       7300)        18.2762     17.3563            .3906
               HUMIDITY (        56,          65) (          81,         88)        19.5706     19.9039            .0728
          PRECIPITATION (         9,          36) (         163,        203)        17.9449     19.6955            .9014
            TEMPERATURE (   -4.2000,      -.4000) (     21.8000,    26.7000)        17.8793     19.4190            .7441
                   AMPD (    9.0200,     13.4600) (     65.2700,    92.5000)        17.0313     21.8918          12.5485*

 13000323        ZIPCODE (     14467,       49910) (       93341,      99207)        23.6093     20.6046           1.7596
             POPULATION (       150,        6200) (      100000,     535000)        22.6036     22.7384            .0034
                  SLOPE (        A1,          B2) (          C5,         D5)        22.7438     22.2821            .0252
              ELEVATION (        12,          65) (        4090,       5700)        20.9862     20.2149            .0738
               HUMIDITY (         1,          61) (          78,         88)        21.5466     22.4809            .1051
          PRECIPITATION (         0,          14) (         101,        154)        22.0788     21.4709            .0408
            TEMPERATURE (   -2.4000,      -.5000) (     20.2000,    24.1000)        19.9157     23.5855           1.7443
                   AMPD (    9.6300,     22.3100) (     65.7800,   608.0000)        19.8463     25.7016           8.2668*

 14000612        ZIPCODE (      4048,       11714) (       51728,      98466)        15.8329     16.2864            .0211
             POPULATION (       450,        3080) (      150000,     795000)        16.8714     15.0740           2.1655
                  SLOPE (        A1,          A1) (          C4,         D4)        14.5662     13.7546            .2554
              ELEVATION (         9,          67) (         883,       1540)        15.4820     12.4671           4.5482*
               HUMIDITY (        62,          70) (          82,         93)        15.4844     15.2357            .0242
          PRECIPITATION (         9,          60) (         140,        222)        14.7767     16.4577           2.9164
            TEMPERATURE (   -4.2000,      -.2000) (     22.3000,    28.1000)        13.8084     16.2499           4.0753*
                   AMPD (    8.2000,     15.3400) (     44.0000,    57.2100)        11.9132     16.6151          18.8316*

 14000912        ZIPCODE (     11367,       15236) (       76134,      84015)        11.0595     12.9989           4.9566*
             POPULATION (       161,        2496) (      950000,    3000000)        14.5082     11.8904           4.9544*
                  SLOPE (        A1,          A1) (          C5,         D4)        13.2181     11.9435            .9256
              ELEVATION (        10,          45) (        2010,       5280)        11.4795     12.9985           2.5965
               HUMIDITY (        54,          68) (          84,         90)        12.1515     11.3439            .5693
          PRECIPITATION (         7,          33) (         118,        162)        12.6048     13.8212            .6508
            TEMPERATURE (   -4.2000,     -1.5000) (     20.6000,    27.5000)        12.3689     13.9572           1.1566
                   AMPD (    9.3500,     13.8500) (     41.8300,   107.8300)        10.3190     14.1627          17.8407*

 14500912        ZIPCODE (      2052,       13730) (       80907,      99802)        12.5223     11.4599            .6506
             POPULATION (       189,         700) (      850000,    3520000)        15.0341     10.3995          35.6459*
                  SLOPE (        A1,          A1) (          C4,         C6)        12.1320     11.8124            .0460
              ELEVATION (        10,          45) (        1600,       6008)        10.3986     12.0397           1.0878
               HUMIDITY (        47,          66) (          88,         91)        12.1786     10.7127            .5904
          PRECIPITATION (         9,          34) (         179,        203)        11.9627     13.4807            .8222
```

Table 4-1. GM Fuel Economy Study
Harmonic Mean Fuel Economy Comparisons (N = 5) (Continued)

```
             TEMPERATURE (    -5.4000,    -1.9000) (   26.7000,   27.5000)    11.1890    11.8458          .2957
                    AMPD (     6.2400,    13.1500) (   72.8900,  270.0000)    10.3265    14.9649        34.9261*

15250914         ZIPCODE (      4231,      13021) (     69030,     97411)    11.8273    13.1288          .1026
              POPULATION (       200,        693) (    160000,   3000000)    13.2492    10.9668         3.8402
                   SLOPE (        A1,         A1) (        C3,        D5)    11.1917    11.9114         1.5743
               ELEVATION (        10,         57) (       990,      1680)    11.4914    12.7668         3.1329
                HUMIDITY (        65,         58) (        83,        91)    12.3446    10.8798         1.9718
           PRECIPITATION (         3,         49) (       156,       222)    11.5333    11.4684          .0133
             TEMPERATURE (    -4.7000,    -1.2000) (   22.3000,   28.1000)    11.5810    12.5349         1.5253
                    AMPD (     9.8100,    13.1500) (   59.2500,  151.2500)    10.4928    12.3301         6.2938*

15251212         ZIPCODE (     14055,      17236) (     70549,     97473)    11.7292    13.3276         1.4862
              POPULATION (       100,        900) (    100000,   3600000)    12.3009    12.2370          .0024
                   SLOPE (        A1,         B2) (        C5,        D5)    11.9598    13.0101          .4628
               ELEVATION (        40,        400) (      1100,      1450)    13.1065    11.6093         2.4306
                HUMIDITY (        64,         71) (        82,        85)    13.4038    11.9011         2.5335
           PRECIPITATION (        22,         39) (       128,       197)    12.7708    13.0453          .0689
             TEMPERATURE (    -4.2000,     -.2000) (   19.9000,   24.3000)    11.7580    13.7097         1.6351
                    AMPD (     9.5700,    22.3900) (  130.8000,  394.0000)    10.7002    15.2865        20.6576*

23000313         ZIPCODE (      2158,       6877) (     91793,     98273)    20.9044    16.7879        12.3374*
              POPULATION (       300,       4061) (    535000,   3520000)    20.3242    16.1436        15.6486*
                   SLOPE (        A1,         A2) (        C5,        D5)    16.8742    18.0971          .3712
               ELEVATION (        19,         35) (      1155,      2030)    19.5630    17.3904          .8622
                HUMIDITY (         1,         64) (        80,        87)    17.5251    18.7839          .9472
           PRECIPITATION (         0,         37) (       132,       165)    17.2148    18.6091          .3702
             TEMPERATURE (    -3.0000,     6.9000) (   22.3000,   24.7000)    17.0305    17.4800          .0438
                    AMPD (     6.7900,    10.2200) (   39.2500,  580.0000)    15.7867    22.1412        12.7366*

23000323         ZIPCODE (      4011,      33494) (     93033,     98148)    26.0967    19.7766        10.2844*
              POPULATION (       200,       8000) (    174323,   7000000)    24.4340    21.0464         1.4310
                   SLOPE (        A1,         A2) (        C5,        C5)    21.8437    20.7199          .1339
               ELEVATION (        13,         50) (       900,      6740)    24.1055    20.2193         2.6746
                HUMIDITY (         1,         56) (        83,        87)    20.0263    18.7651          .4351
           PRECIPITATION (         0,         33) (       132,       192)    19.7324    21.8052          .5795
             TEMPERATURE (    -6.9000,     1.1000) (   22.3000,   27.3000)    18.2965    24.8460         9.3077*
                    AMPD (    10.9300,    20.9700) (   49.4200,  243.0000)    18.9691    24.7980         4.0625*

24000911         ZIPCODE (      6040,      15775) (     92931,     98632)    12.3306    14.5639         3.7243
              POPULATION (       522,       2149) (    700000,  16000000)    15.6702    12.6565         5.5299*
                   SLOPE (        A1,         A1) (        C5,        D6)    13.7129    14.1505          .1321
               ELEVATION (         5,         19) (      1539,      6271)    13.0048    14.7296         2.0989
                HUMIDITY (        49,         64) (        82,        87)    14.5370    10.2687         4.6898*
           PRECIPITATION (        10,         29) (       146,       182)    14.5639    11.2334         1.2312
             TEMPERATURE (    -6.9000,    -1.3000) (   23.2000,   26.4000)    12.0447    13.3994         1.1554
                    AMPD (     5.4400,    14.9600) (   58.4600,   92.3700)     9.1899    15.0266        23.6529*

24500911         ZIPCODE (     11501,      24263) (     73044,     98499)    13.6769    12.7563          .3891
              POPULATION (       207,        400) (    148000,   5600000)    15.3293    11.3279         8.5248*
                   SLOPE (        A1,         A1) (        C4,        C5)    13.0301    14.7696         1.5734
               ELEVATION (         5,         17) (      1230,      3368)    10.8401    15.3350        14.6277*
                HUMIDITY (        61,         70) (        80,        83)    13.3753    12.6834          .1116
           PRECIPITATION (         9,         37) (       141,       179)    12.9121    13.4847          .2165
             TEMPERATURE (      .9000,     5.9000) (   24.1000,   27.3000)    13.2057    12.4841          .4429
                    AMPD (     9.4800,    15.8900) (   82.8900,  188.5000)    11.2853    15.4210         8.5448*
```

Table 4-1. GM Fuel Economy Study
Harmonic Mean Fuel Economy Comparisons (N = 5) (Continued)

```
24501211        ZIPCODE (      1701.      15342) (     77015.     94553)   11.9896   13.0657          1.4618
             POPULATION (       200.       1878) (    540000.   3520000)   11.8543   12.5200           .7798
                  SLOPE (        A1.         A1) (        C4.        D4)   10.8694   12.5764          1.9143
              ELEVATION (        11.         20) (       960.      1370)   11.7395   12.8537          1.3048
               HUMIDITY (        33.         67) (        79.        83)   13.3954   11.6223          3.9888*
          PRECIPITATION (         0.         41) (       156.       192)   13.4777   12.1312          1.0996
            TEMPERATURE (    3.8000.     5.9000) (   22.3000.   27.3000)   12.1254   12.6447           .3512
                   AMPD (   11.5300.    15.4500) (   69.1000.  127.7500)   13.9543   14.4525         19.4170*

25251111        ZIPCODE (      7621.      11364) (     54303.     98020)   11.3563   13.4596          3.4446
             POPULATION (       125.       3308) (    222000.    560000)   12.5601   10.2454         11.8937*
                  SLOPE (        A1.         A1) (        C4.        D4)   11.8743    9.8164          4.1104*
              ELEVATION (         7.         25) (       980.      1400)   12.3264   12.0249           .0927
               HUMIDITY (        65.         67) (        80.        85)   11.3449   11.9998           .4557
          PRECIPITATION (        21.         80) (       160.       222)   12.1275   12.1138           .3022
            TEMPERATURE (   -1.7000.      .3000) (   22.4000.   28.1000)   11.2689   13.5067          6.2802*
                   AMPD (   13.2800.    17.4600) (  113.6000.  231.2500)   11.5852   13.8983         17.0018*

25251212        ZIPCODE (      1940.      14141) (     45662.     70072)   10.7513   12.3278          4.8562*
             POPULATION (      1212.       4174) (    100000.    925000)   11.4683   10.3965           .9392
                  SLOPE (        A1.         B2) (        C4.        C5)   11.3766   10.8047           .2222
              ELEVATION (        20.         44) (       760.      1600)   10.5422   11.7375          1.4355
               HUMIDITY (        64.         68) (        80.        88)   10.9408   11.5316           .5132
          PRECIPITATION (         9.         71) (       143.       312)   12.4667   11.2043          2.8555
            TEMPERATURE (   -4.2000.      .3000) (   25.5000.   26.3000)   10.6925   12.4470          2.7100
                   AMPD (    5.3800.    21.2900) (   65.4400.  101.7500)    9.7670   12.7991         13.6185*

34000711        ZIPCODE (      1824.      14617) (     68601.     98615)   14.9213   14.3762           .1573
             POPULATION (       527.       3452) (    223000.    560000)   15.9473   12.9160         12.2770*
                  SLOPE (        A1.         A2) (        C3.        D6)   14.1536   14.3598           .0146
              ELEVATION (        18.        102) (       951.      2146)   14.0345   14.7841           .8726
               HUMIDITY (        66.         70) (        80.        84)   14.1649   14.0564           .0037
          PRECIPITATION (        15.         37) (       154.       183)   14.4355   14.4657           .0006
            TEMPERATURE (   -3.6000.     5.9000) (   23.2000.   26.4000)   13.7300   13.9943           .0638
                   AMPD (    7.0700.    14.2600) (   44.3300.  133.0000)   12.3139   16.3375         13.1952*

34501011        ZIPCODE (     21530.      28779) (     75231.     81501)   14.0492   14.9141          3.9464*
             POPULATION (       165.        971) (    378000.    850000)   14.9229   14.7799           .0320
                  SLOPE (        A1.         A1) (        C4.        C5)   12.9581   12.9873           .0005
              ELEVATION (         5.        257) (      1289.      4596)   12.5364   14.7003          5.6176*
               HUMIDITY (        33.         67) (        79.        80)   14.2611   12.9499           .8408
          PRECIPITATION (        11.         50) (       139.       287)   13.3055   14.0777           .5372
            TEMPERATURE (    3.9000.     5.6000) (   27.1000.   27.6000)   13.2832   14.4069          2.2569
                   AMPD (    7.9400.    16.0600) (   54.9500.   72.4400)   13.2726   14.9389          3.6839

35251012        ZIPCODE (      1844.       7090) (     49779.     79701)   14.1294   13.6975           .5853
             POPULATION (       110.       1500) (    345000.    560000)   14.5963   13.6204           .6794
                  SLOPE (        A1.         A1) (        C4.        D4)   13.7221   12.5491          1.0827
              ELEVATION (         7.         35) (      1060.      2779)   13.4046   13.3462           .0045
               HUMIDITY (        52.         65) (        80.        91)   12.9948   12.1822           .4141
          PRECIPITATION (        14.         61) (       163.       180)   14.3625   13.8080          1.1829
            TEMPERATURE (   -1.7000.      .3000) (   26.0000.   27.5000)   11.6726   14.1102          9.2455*
                   AMPD (    5.6700.    13.9800) (  136.3800.  276.5000)   11.4701   14.9270         16.0766*

35501411        ZIPCODE (      1603.       9773) (     77376.     99336)   13.4617   11.5150          3.0095
             POPULATION (       400.       1000) (    844401.   8080000)   13.9733   10.7767         15.9801*
                  SLOPE (        A1.         A1) (        B5.        C5)   11.6949   11.6979           .0000
              ELEVATION (         9.         30) (      1226.      3100)   10.9335   11.4036           .0773
               HUMIDITY (        16.         64) (        80.        91)   11.4150   12.2899           .9361
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Table 4-1. GM Fuel Economy Study
Harmonic Mean Fuel Economy Comparisons (N = 5) (Concluded)

```
            PRECIPITATION (        0,       30)  (      153,      239)    11.3837   13.1160         1.0556
              TEMPERATURE (  -1.9000,   -.7000)  (  27.2300,  30.3000)    13.2835   12.0237         3.0346
                     AMPD (  13.1800,  14.3000)  (  92.2200, 147.8300)    11.6428   14.0341         7.0102*

55501412          ZIPCODE (    11545,    13656)  (    75220,    81625)    10.8242   11.5498          .2406
               POPULATION (      120,     2283)  (   540325,   944401)    12.9182   11.2350        18.8188*
                    SLOPE (       A1,       A2)  (       C3,       C5)     9.6979    9.9427          .0305
                ELEVATION (       20,      381)  (     1176,     6186)    10.7928   11.2647          .3653
                 HUMIDITY (       54,       67)  (       83,       91)    11.1289   12.2430          .5796
            PRECIPITATION (        3,       21)  (      146,      160)    11.7685   10.3419         1.2437
              TEMPERATURE (  -4.7000,  -2.8000)  (  23.1000,  27.2000)    12.0481   10.5476         3.6251
                     AMPD (   5.7300,  11.6200)  ( 131.3300, 461.5000)     9.7392   14.3875        40.9741*

44500912          ZIPCODE (     1501,     5435)  (    55109,    77007)    12.4244   12.7264          .0582
               POPULATION (      336,     3187)  (   925000,   808000)    13.2751   11.4320         2.7897
                    SLOPE (       A1,       A1)  (       C4,       C4)    12.1147   10.7600          .5023
                ELEVATION (        6,       13)  (      937,     1700)    11.2962   11.9960          .1743
                 HUMIDITY (       62,       65)  (       77,       85)    11.5164   11.4746          .0026
            PRECIPITATION (       53,       93)  (      163,      233)    13.1700   11.0967         1.5335
              TEMPERATURE (  -2.9000,   -.2000)  (  22.4000,  26.7000)    12.0096   13.0427         1.1280
                     AMPD (   9.1300,  13.7900)  (  57.7500, 112.2000)    10.2610   12.0297         4.4944*

45001413          ZIPCODE (     1801,     7350)  (    78332,    99208)    10.4334    9.8165          .8331
               POPULATION (      145,     2050)  (   222000,   758000)    10.8547   12.5440         3.1799
                    SLOPE (       A1,       A2)  (       C4,       D4)    12.4197   11.6193         6.4622*
                ELEVATION (        7,      160)  (     1230,     2216)    11.4641    9.9249         1.8146
                 HUMIDITY (       44,       70)  (       92,       88)     9.9737   11.0199         2.6036
            PRECIPITATION (        4,       41)  (      152,      192)    10.4751   10.8133          .1019
              TEMPERATURE (   -.8000,   -.7000)  (  21.6000,  26.7000)    10.7225   12.3815         5.8724*
                     AMPD (  11.2400,  20.4200)  (  71.6900, 163.6000)     9.6065   13.2084        61.4015*

45251014          ZIPCODE (    11758,    14226)  (    78629,    92335)     9.5235   10.8677         1.1564
               POPULATION (      250,      650)  (   300000,  3000000)    11.9252   11.3092          .2410
                    SLOPE (       A1,       A1)  (       B3,       D6)    12.0262   12.3020          .1160
                ELEVATION (       20,      200)  (     1097,     4061)    12.8949   10.9197         3.3797
                 HUMIDITY (       53,       72)  (       88,       91)    11.8263    9.8343         2.2958
            PRECIPITATION (        0,       46)  (      152,      189)    11.7918   11.2552          .2871
              TEMPERATURE (  -4.2000,  -2.0000)  (  25.7000,  27.2000)    11.7314   10.9111         1.0734
                     AMPD (   8.4800,  11.2400)  ( 104.1700, 314.5000)     9.0610   14.8064        24.3634*

45501412          ZIPCODE (     1970,     6450)  (    85252,    94702)    11.0318   11.6882          .3177
               POPULATION (      140,     1033)  (    85000,  3000000)    11.4789    9.3082         4.1978*
                    SLOPE (       A1,       A1)  (       C4,       D5)    10.4895    9.8972          .3750
                ELEVATION (        5,       24)  (     1250,     3900)    10.0034   11.7353         6.3419*
                 HUMIDITY (       16,       65)  (       94,       88)    12.6733   10.9242         6.7738*
            PRECIPITATION (        0,        9)  (      179,      312)    11.6882    9.7726         2.6520
              TEMPERATURE (  -9.1000,  -1.7000)  (  26.0000,  30.3000)    11.2559   11.9062          .3509
                     AMPD (  12.5100,  16.7900)  ( 132.8000, 432.0000)     9.0181   12.7623        29.1816*

65501512          ZIPCODE (     1940,     7712)  (    34086,    95825)    10.3839   11.1140          .5651
               POPULATION (      600,     1600)  (  2750000,  8390000)    11.5849   10.3444         1.1743
                    SLOPE (       A1,       A1)  (       C5,       D4)    11.1129   10.4033          .4418
                ELEVATION (       10,       25)  (     2726,     4498)    10.8296   10.0603          .0239
                 HUMIDITY (       39,       51)  (       87,       88)    10.9149   12.4120         4.2688*
            PRECIPITATION (        0,        1)  (      182,      192)    10.0556   10.2291          .0289
              TEMPERATURE (  -1.9000,   -.4000)  (  26.7000,  28.6000)    10.9527   11.0414          .0287
                     AMPD (   5.0400,  11.8600)  (  84.2900, 742.0000)     9.7783   12.4078        36.2664*
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Table 4-2. GM Fuel Economy Study
Harmonic Mean Fuel Economy Comparisons (N = 10)

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DATE      91376
SALES WEIGHTED    NO
NUMBER OF CARS IN PARAMETER RANGE 1    10
NUMBER OF CARS IN PARAMETER RANGE 2    10
CRITICAL VALUE OF TEST STATISTIC AT .05 SIGNIFICANCE   LEVEL  =     3.84146

   CLASS      PARAMETER           RANGE1                      RANGE2              MEAN MPG1  MEAN MPG2 TEST STATISTIC

13000313        ZIPCODE (      2828.,     48105) (     72820.,     99109)    20.1532    18.5535         1.8656
             POPULATION (       120.,     13100) (    110000.,   3000000)    19.4737    19.5621          .0057
                  SLOPE (        A1,         B2) (        B3,         D4)    18.8957    18.5593          .0546
              ELEVATION (        25.,       250) (       660.,      7700)    18.5269    19.0231          .1346
               HUMIDITY (        56.,        73) (        76.,        88)    19.0426    19.0763          .0018
          PRECIPITATION (         9.,        56) (        97.,       207)    18.3510    20.1558         2.7878
            TEMPERATURE (    -4.2000,    6.9000) (    19.5100,   26.7000)    19.0855    19.6875          .2314
                   AMPD (     9.0200,   30.1000) (    37.5300,   92.5000)    16.6920    21.6056        37.6959*

13000323        ZIPCODE (     14457.,     77546) (     84601.,     99207)    22.9769    21.0620         1.0491
             POPULATION (       150.,     35500) (    543000.,   5350000)    22.6789    22.1124          .0907
                  SLOPE (        A1,         B3) (        B6,         D5)    22.5172    21.8891          .1015
              ELEVATION (        12.,       650) (      1100.,      5300)    21.9349    22.2994          .0738
               HUMIDITY (         1.,        73) (        72.,        88)    22.4327    22.0135          .0112
          PRECIPITATION (         3.,        42) (        55.,       154)    21.2025    23.1599         1.0571
            TEMPERATURE (    -2.4000,    9.2000) (    13.2000,   24.1000)    21.2030    23.0671         1.0094
                   AMPD (     9.6300,   36.0000) (    42.4200,  608.0000)    19.6802    25.3523        17.5517*

14000612        ZIPCODE (      4048.,     18704) (     49079.,     98466)    15.0894    15.8953          .5108
             POPULATION (       450.,     19000) (    100000.,   7950000)    15.6063    15.5334          .0034
                  SLOPE (        A1,         A2) (        B3,         D4)    15.4141    14.6792          .4773
              ELEVATION (         9.,       436) (       760.,      1740)    16.1104    13.6399         5.3513*
               HUMIDITY (        62.,        72) (        78.,        93)    15.5927    14.4927         1.1088
          PRECIPITATION (         9.,        82) (       118.,       222)    13.4159    15.8407         3.6431
            TEMPERATURE (    -4.2000,    1.7000) (    20.6300,   28.1000)    12.8285    16.2910        14.6580*
                   AMPD (     8.2000,   20.2100) (    33.4300,   57.2100)    13.2834    16.6249        13.2809*

14000912        ZIPCODE (     11367.,     19151) (     60521.,     94015)    11.3549    13.1126         5.5908*
             POPULATION (       161.,     12900) (    351700.,   3000000)    14.4233    11.6325        11.6094*
                  SLOPE (        A1,         A2) (        B3,         D4)    13.1713    12.4771          .4936
              ELEVATION (        10.,       326) (      1030.,      5280)    12.0031    12.7749          .3665
               HUMIDITY (        54.,        73) (        81.,        90)    12.1936    12.4238          .0591
          PRECIPITATION (         7.,        61) (       104.,       162)    12.4536    13.8534         2.5374
            TEMPERATURE (    -4.2000,    -.3000) (    12.6000,   27.5000)    12.3752    14.0149         3.1075
                   AMPD (     9.3500,   15.9200) (    36.8800,  107.8300)    10.9750    13.9519        19.3263*

14500912        ZIPCODE (      2052.,     15219) (     76031.,     99802)    11.8078    11.8559          .0023
             POPULATION (       189.,       956) (    500000.,   3520000)    14.1579    11.5604        31.2773*
                  SLOPE (        A1,         A2) (        C3,         D6)    12.5602    13.8169          .6098
              ELEVATION (        11.,       173) (      1015.,      6008)    11.5985    12.2344          .3088
               HUMIDITY (        47.,        68) (        85.,        91)    11.7471    11.4526          .0864
          PRECIPITATION (         9.,        43) (       149.,       263)    12.1239    13.1136         1.2073
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Table 4-2. GM Fuel Economy Study
Harmonic Mean Fuel Economy Comparisons (N = 10) (Continued)

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             TEMPERATURE (   -5.4000,    -.9000) (   24.1000,   27.5000)   11.3515   12.4053    1.6601
                    AMPD (    5.2400,   12.9000) (   58.1800,  270.0000)   11.3721   13.8046   23.4511*

15250914         ZIPCODE (      4231,     25312) (     60438,     97411)   11.4969   11.6982     .6336
              POPULATION (       200,      5000) (    100000,   3300000)   12.6634   11.5121    2.5604
                   SLOPE (        A1,        A2) (        B2,        D5)   11.8745   11.9331     .0384
               ELEVATION (        10,       230) (       757,      1680)   11.7148   12.6772    2.5165
                HUMIDITY (        55,        72) (        82,        91)   11.7314   11.6338     .0174
           PRECIPITATION (         3,        60) (       117,       222)   11.9538   12.0158     .0128
             TEMPERATURE (   -4.7000,    -.4000) (   21.8000,   28.1000)   11.7822   12.0154     .1684
                    AMPD (    9.8100,   17.3900) (   33.3900,  151.2500)   11.4454   12.9547    5.1259*

15251212         ZIPCODE (     14055,     37076) (     50034,     97470)   11.9294   12.4026     .3294
              POPULATION (       100,      3400) (     37608,   3600000)   12.2675   12.1102     .0270
                   SLOPE (        A1,        B2) (        C2,        D5)   12.0949   12.7456     .5791
               ELEVATION (        40,       591) (       870,      1450)   12.4773   12.5618     .0079
                HUMIDITY (        64,        74) (        77,        85)   12.6638   11.5821    1.7400
           PRECIPITATION (        22,        90) (       113,       197)   11.6420   13.1451    2.8971
             TEMPERATURE (   -4.2000,    1.9000) (    6.2000,   24.3000)   12.0132   13.5518    3.6649
                    AMPD (    9.5700,   35.3800) (   49.2200,  394.0000)   11.2472   13.5323    6.3346*

23000313         ZIPCODE (      2158,     70310) (     49109,     98273)   19.2497   19.0872    1.0214
              POPULATION (       300,     10036) (    110642,   3520000)   20.2486   15.7851   24.7006*
                   SLOPE (        A1,        B2) (        C4,        C5)   17.4517   18.5229     .6869
               ELEVATION (        19,       287) (       744,      2030)   18.4884   17.0887    1.1970
                HUMIDITY (         1,        56) (        74,        87)   18.3732   18.4937     .0128
           PRECIPITATION (         0,        60) (       118,       165)   17.4595   19.3982    1.7253
             TEMPERATURE (   -3.0000,   13.2000) (   20.6000,   24.7000)   16.9098   19.2287    1.2380
                    AMPD (    6.7900,   17.8300) (   33.5000,  583.0000)   16.5895   20.8372   16.0464*

23000323         ZIPCODE (      4011,     52402) (     90731,     98148)   24.2318   20.3083   11.5727*
              POPULATION (       200,     79000) (    100000,   7000000)   22.4398   21.2016     .4473
                   SLOPE (        A1,        B2) (        B3,        C5)   21.2114   21.8093     .1206
               ELEVATION (        13,       282) (       694,      6748)   22.7516   21.7862     .2930
                HUMIDITY (         1,        69) (        75,        87)   21.0902   20.8187     .0268
           PRECIPITATION (         0,        57) (        65,       192)   19.7529   23.1533    4.0040*
             TEMPERATURE (   -6.9000,   13.2000) (   18.1000,   27.3000)   19.0755   24.1892   15.4937*
                    AMPD (   10.9300,   26.3000) (   34.8100,  243.0000)   19.7590   23.3419    5.1578*

24000911         ZIPCODE (      6040,     21061) (     73651,     98632)   12.1645   14.1920    4.9849*
              POPULATION (       522,      7000) (    160000,  16000000)   14.7725   12.7464    5.6126*
                   SLOPE (        A1,        A1) (        B5,        D6)   12.7239   13.5161     .7861
               ELEVATION (         5,        57) (       895,      6271)   13.2772   14.2461    1.8397
                HUMIDITY (        49,        67) (        80,        87)   14.1143   11.4867    4.4732*
           PRECIPITATION (        10,        44) (       117,       182)   12.6549   13.2184     .1792
             TEMPERATURE (   -6.9000,    4.2000) (   21.9000,   26.4000)   13.8059   13.7507    7.7142*
                    AMPD (    5.4400,   18.3900) (   45.2900,   92.3700)   13.9246   15.2366   15.3725*

24500911         ZIPCODE (     11501,     29607) (     53095,     98499)   13.4020   12.7548     .3055
              POPULATION (       207,      1521) (    100000,   5600000)   14.6284   11.4343   13.9448*
                   SLOPE (        A1,        A1) (        B3,        D5)   12.2674   14.0702    6.2296*
               ELEVATION (         5,        57) (      1000,      3368)   11.4668   14.9055   15.9798*
                HUMIDITY (        61,        71) (        78,        83)   12.9339   12.6986     .0464
           PRECIPITATION (         9,        64) (       124,       179)   12.4635   12.7446     .0785
             TEMPERATURE (     .9000,    8.9000) (   20.6000,   27.3000)   13.0605   13.4198     .2556
                    AMPD (    9.4800,   20.0000) (   64.2200,  188.5000)   11.9577   15.3042   17.5253*
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Table 4-2. GM Fuel Economy Study
Harmonic Mean Fuel Economy Comparisons (N = 10) (Continued)

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245.1211        ZIPCODE (        17.1.       24677) (       48219.       94553)   12.3545   12.8553       .6[illegible]
             POPULATION (         230.        7457) (      198000.     3570000)   12.5117   12.4237       ..176
                  SLOPE (          A1.          A1) (          03.          04)   11.6619   12.1647       .4[illegible]
              ELEVATION (          11.          55) (         730.        1370)   12.2418   12.[illegible]   .[illegible]7
               HUMIDITY (          73.          70) (          78.          83)   12.7478   11.[illegible]   1.2434
          PRECIPITATION (   [illegible]          51) (         131.         192)   12.2459   12.4[illegible]   .[illegible]77
            TEMPERATURE (  1.8[illegible]  4.5[illegible]) (  21.8[illegible]  27.[illegible])   12.3577   12.3445       .[illegible]7
                   AMPD (     11.5300.   19.74[illegible]) (  49.33[illegible]  127.75[illegible])   11.3.44   14.1[illegible]4    27.9991*

2525:111        ZIPCODE (        7021.      151.6) (        48[illegible]   48.2[illegible])   11.57[illegible]2   12.4549      3.[illegible]16
             POPULATION (         125.        8853) (      100000.     5600000)   13.1450   11.1950      4.8912*
                  SLOPE (          A1.          A2) (          03.          04)   11.8461   11.9982      1.2875
              ELEVATION (           7.          55) (          84.        14[illegible])   11.9873   12.2129       .[illegible]76
               HUMIDITY (          65.          72) (          77.          85)   11.7233   12.7442      2.6[illegible]
          PRECIPITATION (          21.          94) (         134.         223)   12.3274   12.7924       .2[illegible]
            TEMPERATURE (    -1.70[illegible]    3.8[illegible]) (    21.4[illegible]    28.1[illegible])   11.7424   12.9[illegible]3   11.6352*
                   AMPD (      13.2800.     21.1900) (       45.1300.   231.2500)   11.3751   13.6331      17.8[illegible]*

2525:212        ZIPCODE (        1940.       19153) (        21224.        7[illegible]72)   11.7416   11.[illegible]3      2.3717
             POPULATION (        1212.       26200) (      100000.      925000)   11.7242   11.7924      1.712*
                  SLOPE (          A1.          02) (          03.          05)   11.2[illegible]   11.1876       .[illegible]
              ELEVATION (          20.         226) (         640.         16[illegible])   11.9756   11.6379       .7[illegible]
               HUMIDITY (          54.          74) (          75.          83)   11.3818   11.6344       .1943
          PRECIPITATION (           9.         132) (         113.         312)   11.5242   11.2875       .1151
            TEMPERATURE (   -4.2[illegible]    4.1[illegible]) (     6.2[illegible]    26.3[illegible])   1[illegible].996[illegible]   11.8915      1.7611
                   AMPD (       5.3800.     33.4000) (       45.[illegible]   101.7500)   11.1284   12.5554     19.2681*

340[illegible]711        ZIPCODE (        1824.       28734) (        54885.       38615)   14.6829   14.3521       .[illegible]97
             POPULATION (         527.       17[illegible]) (      100000.      560000)   14.8717   17.9185      1.1157
                  SLOPE (          A1.          02) (          03.          06)   14.3779   14.8757       .2[illegible]6
              ELEVATION (          18.          67) (         730.        2146)   14.6679   14.1400       .3[illegible]55
               HUMIDITY (          56.          71) (          77.          84)   13.8855   14.9218       .9[illegible]4
          PRECIPITATION (          15.          54) (         114.         183)   15.2247   14.1059      1.4470
            TEMPERATURE (    -3.6000.    18.7000) (      21.6000.    26.4000)   14.8163   14.5327       .[illegible]
                   AMPD (       7.3700.     21.9300) (      37.1700.   133.0000)   12.8549   15.7993     13.176[illegible]*

3450:111        ZIPCODE (        2193.       33317) (        55421.       81501)   13.2899   14.5737      4.4476*
             POPULATION (         165.        2[illegible]1) (      198000.     45[illegible])   14.6642   13.8546      1.3381
                  SLOPE (          A1.          A3) (          03.          05)   14.3924   13.2228      1.3253
              ELEVATION (           5.         512) (         9[illegible].        4596)   13.5[illegible]74   14.[illegible]927       .6664
               HUMIDITY (          33.          72) (          76.          83)   14.3498   13.9289       .2162
          PRECIPITATION (          11.          72) (         119.         287)   13.4[illegible]97   14.[illegible]536       .5[illegible]86
            TEMPERATURE (      3.9000.    1[illegible].3000) (      22.6000.    27.6000)   12.8556   14.2603     1[illegible].6592*
                   AMPD (       7.9400.     22.2900) (      45.5000.    72.4400)   12.4979   14.8633     19.5236*

3525:212        ZIPCODE (        1844.       1[illegible]5[illegible]) (        43776.       79701)   13.9[illegible]   13.2866       .9876
             POPULATION (         110.        4462) (      216000.      560000)   14.1252   13.94.5       .[illegible]59[illegible]
                  SLOPE (          A1.          A2) (          04.          04)   13.6483   12.9833      1.3363
              ELEVATION (           7.          73) (         885.        2779)   13.2375   12.82.1       .3132
               HUMIDITY (          52.          66) (          78.          91)   13.1479   12.4[illegible]64       .7343
          PRECIPITATION (          14.          71) (         160.         180)   13.7246   13.7486       .[illegible]28
            TEMPERATURE (    -1.70[illegible]     3.3000) (      22.[illegible]    27.[illegible])   11.7827   14.12[illegible]3     19.5506*
                   AMPD (       3.67[illegible]    14.7200) (      64.9[illegible]   276.5[illegible])   11.8826   14.8867     28.8891*

3550:411        ZIPCODE (        16[illegible].       [illegible]34) (        75069.       49336)   11.4106   13.1789       .4312
             POPULATION (         4[illegible].       44[illegible]) (      110000.     8380000)   13.5298   11.5610      7.4384*
                  SLOPE (          A1.          A2) (          07.          05)   11.3266   12.1414       .721[illegible]
              ELEVATION (           9.          55) (         850.        3100)   11.3663   12.2014       .6.2[illegible]
               HUMIDITY (          16.          64) (          77.          91)   11.8771   12.8737      2.3103
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Table 4-2. GM Fuel Economy Study
Harmonic Mean Fuel Economy Comparisons (N = 10) (Concluded)

	PRECIPITATION	(3.	53)	(145.	239)	11.9126	13.1320	1.3654
	TEMPERATURE	(-1.3[illegible]	1.3[illegible])	(25.9[illegible]	26.3[illegible])	12.5181	12.1813	.1906
	AMPD	(13.18[illegible]	[illegible])	(55.34[illegible]	147.83[illegible])	11.4973	14.1445	16.[illegible]21*
55531412	ZIPCODE	(11545.	17221)	(67401.	61625)	11.4514	12.1357	2.5772
	POPULATION	(120.	4[illegible]5)	(33[illegible]	4444[illegible])	11.1673	11.[illegible]45	3.5[illegible]*
	SLOPE	(41.	42)	(59.	55)	11.6[illegible]32	[illegible]	.[illegible]7[illegible]
	ELEVATION	(20.	553)	(1[illegible]	6186)	11.8961	11.9129	[illegible]
	HUMIDITY	(54.	75)	(82.	91)	11.[illegible]96[illegible]	11.6[illegible]86	[illegible]
	PRECIPITATION	(3.	42)	(112.	16[illegible])	11.[illegible]57	11.[illegible]59	.4[illegible]6[illegible]
	TEMPERATURE	(-4.7[illegible]	-1.2[illegible])	(21.4[illegible]	27.2[illegible])	11.6673	11.[illegible]23[illegible]	1.[illegible]4[illegible]
	AMPD	(5.73[illegible]	17.18[illegible])	(6[illegible]	461.5[illegible])	11.6[illegible]6[illegible]	13.5274	14.[illegible]*
44531912	ZIPCODE	(1571.	7642)	(47095.	77[illegible]7)	11.6917	12.5159	.4716
	POPULATION	(336.	7673)	(1[illegible]	838[illegible])	13.1234	11.4485	1.9932*
	SLOPE	(41.	42)	(59.	64)	11.5427	11.8216	.3443
	ELEVATION	(6.	53)	(630.	172[illegible])	11.4851	12.5641	1.2[illegible]6
	HUMIDITY	(62.	68)	(76.	85)	11.3855	11.4235	.1[illegible]52
	PRECIPITATION	(57.	112)	(15[illegible]	233)	11.7577	11.5383	.4726
	TEMPERATURE	(-3.9[illegible]	3.8[illegible])	(21.[illegible]	26.7[illegible])	11.29[illegible]	12.2438	.7575
	AMPD	(8.13[illegible]	17.3[illegible])	(38.67[illegible]	112.2[illegible])	13.1849	11.5961	1[illegible].675[illegible]*
45531413	ZIPCODE	(1811.	28517)	(58516.	392.8)	11.7875	11.3771	.1861
	POPULATION	(145.	1[illegible])	(1[illegible]	758[illegible])	11.9357	11.3562	.4157
	SLOPE	(41.	42)	(87.	64)	11.1122	11.6178	.5257
	ELEVATION	(7.	539)	(1316.	2216)	11.1435	11.6157	.5217
	HUMIDITY	(44.	72)	(81.	88)	11.[illegible]2	11.6665	.1307
	PRECIPITATION	(4.	7[illegible])	(131.	192)	11.6428	11.9022	.1257
	TEMPERATURE	(-.86[illegible]	.1[illegible])	(11.8[illegible]	26.7[illegible])	[illegible]	12.2379	8.1766*
	AMPD	(11.24[illegible]	22.92[illegible])	(46.11[illegible]	163.6[illegible])	9.813[illegible]	13.[illegible]	47.3466*
45251014	ZIPCODE	(11758.	38517)	(617[illegible]	92335)	11.[illegible]	11.9498	.0128
	POPULATION	(250.	75[illegible])	(543325.	750000[illegible])	11.2037	11.3709	.4928
	SLOPE	(41.	42)	(82.	56)	11.8629	11.3827	.9[illegible]
	ELEVATION	(25.	42[illegible])	(88.	4561)	11.588	11.2561	1.0923
	HUMIDITY	(53.	75)	(85.	91)	11.[illegible]	9.9363	4.2277*
	PRECIPITATION	([illegible]	49)	(145.	189)	11.2[illegible]8	11.4352	[illegible]
	TEMPERATURE	(-4.2[illegible]	-1.3[illegible])	(22.83[illegible]	27.[illegible])	11.8826	11.6461	.1192
	AMPD	(8.48[illegible]	17.[illegible])	(59.86[illegible]	314.5[illegible])	9.8263	13.[illegible]	31.4751*
45531412	ZIPCODE	(1976.	12148)	(71375.	96722)	11.7508	11.9426	7.1613
	POPULATION	(143.	3747)	(1317[illegible]	330000[illegible])	11.4479	9.8454	7.7416
	SLOPE	(41.	41)	(86.	55)	11.2718	11.8227	.6808
	ELEVATION	(5.	42)	(865.	34[illegible])	11.4549	11.6302	4.[illegible]*
	HUMIDITY	(16.	68)	(83.	88)	12.[illegible]	11.[illegible]	13.446[illegible]*
	PRECIPITATION	([illegible]	37)	(124.	312)	11.[illegible]58	11.[illegible]128	1.7786
	TEMPERATURE	(-3.16[illegible]	-.4[illegible])	(23.4[illegible]	3[illegible])	11.9762	11.[illegible]	1.5385
	AMPD	(12.51[illegible]	20.14[illegible])	(74.11[illegible]	432.[illegible])	9.3925	12.7579	51.2510*
65531512	ZIPCODE	(1940.	15137)	(41818.	55825)	10.7218	11.2272	.4611
	POPULATION	(600.	3072)	(853[illegible]	6080[illegible])	11.4632	10.8166	.7938
	SLOPE	(41.	41)	(57.	64)	11.[illegible]55	11.1287	.[illegible]27[illegible]
	ELEVATION	(10.	35)	(9[illegible]	4498)	11.[illegible]	11.[illegible]	[illegible]
	HUMIDITY	(39.	55)	(82.	88)	10.4997	11.77[illegible]	2.5627
	PRECIPITATION	(0.	5)	(156.	192)	11.7446	10.5454	.[illegible]72[illegible]
	TEMPERATURE	(-1.90[illegible]	.5[illegible])	(24.6300.	28.6300)	11.6794	11.[illegible]286	1.1761
	AMPD	(5.14[illegible]	15.34[illegible])	(65.6[illegible]	742.[illegible])	9.9938	12.4756	42.1721*

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due to terrain. For locations in which more than 80 percent of the area is gently sloping (Slope = A), fuel economy for this class was found to be significantly less than for locations in which less than 80 percent of the area is gently sloping (Slope ranges from B to D). This example illustrates one of the reasons it was decided to generate scatter plots of individual car fuel economy versus values of each of the eight parameters under investigation for each carline class. Such plots not only illustrate trends, but can also be used to explain anomalous results. Such a plot for fuel economy versus the terrain index (Slope) for carline Class 24500911 is given in Appendix B (along with all of the other scatter plots). Note that the correlation coefficient for these data is equal to 0.1825. However, since the 95-percent confidence interval for this coefficient (refer to the figure) contains zero, the correlation is not significant. That is, while examining extremes in the data may result in significant differences in mean fuel economy, the data itself do not exhibit any significant trend.

The only carline class that did not exhibit a significant correlation coefficient with respect to AMPD was Class 23000313 (see Appendix B). Note, however, that this was due to a single car where fuel economy was unusually low for the relatively high miles per day traveled.

A detailed analysis was not made of significant differences in fuel economy with respect to those parameters (such as elevation) that occurred infrequently. It was noted, however, that in all four carline classes in which fuel economy increased significantly with increasing zip code, the mean value for average miles per day traveled by those drivers located in high zip code areas was substantially higher than the mean value for average miles per day traveled by drivers located in low zip code areas.

Next to AMPD, differences in mean fuel economy with respect to population occurred most frequently (nine carline classes, refer to Table 4-2). In all nine cases, fuel economy in densely populated areas was found to be significantly less than fuel economy in sparsely populated areas. In four of these carline classes, the data exhibited a significant negative correlation (Appendix B), confirming the tests for differences between fuel economies in extreme population ranges. However, in all but two of the nine classes, it was also found that the mean value for AMPD in the densely populated areas was substantially less than in the sparsely populated areas. In the remaining two classes, the mean value for AMPD was actually greater in the heavily populated areas. Both AMPD and urban versus highway driving conditions associated with the population density of the area in which the car was driven have an effect on fuel economy. In order to determine whether population effects related to driving conditions are affecting the fuel economy of the carline classes in this study, a larger data base is required that would provide a sufficient number of cars per class so that two-way statistical tests could be performed.

Next to population, differences in mean fuel economy with respect to temperature occurred most frequently (seven carline classes, refer to Table 4-2). In all seven cases, fuel economy in a warm climate was found to be significantly greater than fuel economy in a cool climate. In all seven carline classes, the data exhibited a significant positive correlation (Appendix B), confirming the tests for differences between fuel economies in extreme temperature ranges. Again, however, AMPD was consistently higher in the warm climate areas. In four cases, the difference in AMPD could easily account for the increased fuel economy. A larger data base is required to determine whether it is temperature or AMPD that is the dominant factor influencing fuel economy for these carline classes. It would not be surprising to find an increase in fuel economy in a warm climate because of the reduction in time intervals associated with engine warmup.

4.2 DIVISION AND FLEET SALES WEIGHTED MEAN FUEL ECONOMY COMPARISONS

Division and fleet sales weighted harmonic mean fuel economies are listed in Tables 4-3 and 4-4. These values were computed using the formulas of Appendix C. The trends, of course, are the same as those exhibited by the carline classes. That is, fuel economy apparently increases with increasing average miles per day and temperature, and decreases with increasing population. As indicated in Section 4.1, however, further analysis is required before it can be concluded that temperature and population are influencing the fuel economy of these carline classes rather than average miles per day.

Table 4-3. GM Fuel Economy Study
Division Sales Weighted Harmonic Mean Fuel Economy Comparisons

```
DATE      31676
SALES WEIGHTED    YES


NUMBER OF CARS IN PARAMETER RANGE 1   100
NUMBER OF CARS IN PARAMETER RANGE 2   100


 DIVISION       PARAMETER   SWMPG1          SWMPG2                 RANGE 1                        RANGE 2
     1            ZIPCODE   12.8968         13.1448        (       2052,     40201)   (      53213,      99802)
               POPULATION   13.8469         12.6206        (        100,     16500)   (     100000,    3520000)
                    SLOPE   12.9469         12.9966        (         A1,        82)   (         82,         06)
                ELEVATION   13.1508         13.2294        (          9,       544)   (        745,       7300)
                 HUMIDITY   13.2248         12.7368        (          1,        73)   (         76,         91)
            PRECIPITATION   12.7795         13.5126        (          0,        72)   (        103,        222)
              TEMPERATURE   12.3412         14.0209        (    -5.4000,        4.)   (    16.4000,    28.1000)
                     AMPD   11.7962         14.2534        (     6.2400,       24.)   (    35.3000,   608.0000)


NUMBER OF CARS IN PARAMETER RANGE 1    96
NUMBER OF CARS IN PARAMETER RANGE 2    96


 DIVISION       PARAMETER   SWMPG1          SWMPG2                 RANGE 1                        RANGE 2
     2            ZIPCODE   13.0954         13.8334        (       1701,     32653)   (      48221,      98632)
               POPULATION   14.0723         12.7273        (        125,     20800)   (     100000,    3520000)
                    SLOPE   13.2171         13.3896        (         A1,        A2)   (         82,         06)
                ELEVATION   13.1569         13.5151        (          5,       287)   (        690,       6748)
                 HUMIDITY   13.2902         13.3400        (          1,        72)   (         76,         88)
            PRECIPITATION   13.4553         13.5028        (          0,        74)   (        103,        312)
              TEMPERATURE   12.8400         13.8642        (    -6.9000,       13.)   (    19.8000,    28.1000)
                     AMPD   12.2477         14.6989        (     5.3800,       26.)   (    36.6700,   580.0000)


NUMBER OF CARS IN PARAMETER RANGE 1    80
NUMBER OF CARS IN PARAMETER RANGE 2    80


 DIVISION       PARAMETER   SWMPG1          SWMPG2                 RANGE 1                        RANGE 2
     3            ZIPCODE   12.9482         14.1830        (       1603,     27612)   (      48197,      99336)
               POPULATION   14.0249         13.0969        (        110,     20000)   (     100000,    8080000)
                    SLOPE   13.5157         12.9768        (         A1,        82)   (         82,         06)
                ELEVATION   12.6785         13.3728        (          5,       406)   (        720,       6186)
                 HUMIDITY   13.2898         13.4654        (         16,        71)   (         76,         91)
            PRECIPITATION   13.2018         13.2221        (          0,        72)   (        115,        287)
              TEMPERATURE   12.5193         14.0356        (    -4.7000,        5.)   (    20.9000,    30.3000)
                     AMPD   12.0319         14.4567        (     5.6700,       24.)   (    42.3900,   461.5000)
```

Table 4-3. GM Fuel Economy Study
Division Sales Weighted Harmonic Mean Fuel Economy Comparisons (Continued)

```
NUMBER OF CARS IN PARAMETER RANGE 1   104
NUMBER OF CARS IN PARAMETER RANGE 2   104

 DIVISION      PARAMETER     SWMPG1         SWMPG2             RANGE 1                    RANGE 2
                 ZIPCODE    11.1071        11.6126     (       1501,      45304)  (      48055,      99208)
              POPULATION    11.5752        11.0902     (        140,     525000)  (     100000,    8080000)
                   SLOPE    11.2656        11.3878     (         A1,         A2)  (         82,         D6)
               ELEVATION    11.0898        11.7514     (          5,        595)  (        620,       4061)
                HUMIDITY    11.6737        10.8396     (         16,         76)  (         78,         91)
           PRECIPITATION    11.7359        11.3494     (          0,         80)  (        102,        312)
             TEMPERATURE    10.9289        11.6385     (    -8.1000,         4.)  (     4.8000,    30.3000)
                    AMPD    10.4317        12.5228     (     8.1300,        28.)  (    32.2100,   432.3000)
```

Table 4-4. GM Fuel Economy Study
Fleet Sales Weighted Harmonic Mean Fuel Economy Comparisons

```
DATE     31676
SALES WEIGHTED     YES
NUMBER OF CARS IN PARAMETER RANGE 1    480
NUMBER OF CARS IN PARAMETER RANGE 2    480

   FLEET       PARAMETER    SWMPG1        SWMPG2          RANGE 1                     RANGE 2
     1           ZIPCODE   12.6176       13.1942     (     1501,     43008)  (      47371,      99802)
              POPULATION   13.4052       12.4336     (      100,    525000)  (     100000,    8080000)
                   SLOPE   12.8449       12.9639     (       A1,        82)  (         82,         06)
               ELEVATION   12.8233       13.0280     (        5,       590)  (        620,       7300)
                HUMIDITY   13.0696       12.5846     (        1,        74)  (         75,         91)
           PRECIPITATION   12.7942       12.9284     (        0,        82)  (        101,        312)
             TEMPERATURE   12.2497       13.5669     (  -8.1000,        8.)  (    15.9000,    30.3000)
                    AMPD   11.8914       14.0325     (   5.0400,       29.)  (    33.3900,   742.0000)
```

APPENDIX A

LISTING OF DATA BASE

APPENDIX A

LISTING OF DATA BASE

This appendix contains two tables. Included in Table A-1 is a partial listing of the original GM data supplied by the EPA Project Officer for each car that was used in this study. The seasonal, topographical, and geographical data that were either computed directly from data in Table A-1 or acquired from the literature are included in Table A-2.

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Table A-1. GM Data Base Listing (Vehicle Data)

NUMBER	DIVISION	MPG	BODY TYPE	CID-BBL	AXLE RATIO	TRANS.	CITY	STATE	ZIP
1	4.	15.06	9.	9.	2.	1.	LUNENBURG	MA	1462
2	4.	13.35	1.	9.	2.	1.	AUBURN	MA	1501
3	3.	14.52	3.	14.	1.	1.	WORCESTER	MA	1603
4	4.	10.22	5.	14.	3.	1.	WOBURN	MA	1801
5	4.	13.55	[illegible]	9.	2.	1.	DANVERS	MA	1923
6	2.	11.80	2.	12.	2.	1.	LYNNFIELD	MA	1940
7	5.	10.13	3.	15.	2.	1.	LYNNFIELD	MA	1940
8	4.	13.55	3.	14.	2.	1.	SWAMPSCOTT	MA	1970
9	3.	14.12	3.	14.	1.	1.	E BOSTON	MA	2128
10	[illegible]	[illegible]	5.	3.	3.	1.	NEWTON	MA	2158
11	4.	12.70	9.	9.	2.	1.	WEYMOUTH	MA	2188
12	4.	4.20	1.	9.	2.	1.	MANCHESTER	NH	3103
13	4.	10.54	4.	5.	2.	1.	AUGUSTA	ME	4330
14	1.	10.21	6.	9.	2.	2.	MANCHESTR CTR	VT	5254
15	3.	14.01	3.	14.	1.	1.	BURLINGTON	VT	5401
16	4.	13.21	1.	9.	2.	1.	WILLISTON	VT	5495
17	4.	10.32	5.	14.	3.	1.	BRISTOL	CT	6010
18	4.	4.94	5.	14.	3.	1.	BRISTOL	CT	6010
19	1.	14.75	11.	8.	3.	1.	BRISTOL	CT	6010
20	2.	11.33	5.	9.	1.	1.	MANCHESTER	CT	6040
21	4.	11.04	5.	14.	3.	1.	PLAINVILLE	CT	6062
22	3.	11.23	4.	14.	1.	1.	E HARTFORD	CT	6108
23	4.	[illegible]	7.	7.	4.	1.	W HARTFORD	CT	6110
24	4.	13.31	1.	9.	2.	1.	OLD LYME	CT	6371
25	4.	14.44	9.	9.	2.	1.	MERIDEN	CT	6450
26	4.	16.40	3.	14.	2.	1.	MERIDEN	CT	6450
27	4.	15.00	1.	5.	2.	1.	MERIDEN	CT	6450
28	4.	27.72	11.	5.	1.	1.	MERIDEN	CT	6450
29	3.	13.47	3.	14.	1.	1.	NAUGATUCK	CT	6770
30	3.	10.29	3.	14.	1.	1.	MAPLEWOOD	NJ	7040
31	1.	14.82	11.	8.	1.	1.	PARSIPPANY	NJ	7054
32	2.	21.52	8.	3.	3.	2.	PARSIPPANY	NJ	7054
33	2.	10.53	2.	11.	1.	1.	RAHWAY	NJ	7065
34	1.	10.30	1.	9.	2.	1.	SECAUCOS	NJ	7094
35	4.	7.27	1.	9.	2.	1.	JERSEY CITY	NJ	7304
36	3.	7.85	3.	14.	1.	1.	JERSEY CITY	NJ	7306
37	4.	4.54	1.	10.	4.	1.	HAWORTH	NJ	7641
38	4.	11.22	1.	9.	2.	1.	HILLSDALE	NJ	7642
39	5.	10.57	3.	15.	2.	1.	ASBURY PK	NJ	7712
40	4.	14.27	9.	5.	2.	1.	HOWELL	NJ	7727
41	3.	14.06	2.	10.	2.	1.	TURNERSVILLE	NJ	8012
42	2.	8.48	2.	12.	2.	1.	CHERRY HILL	NJ	8034
43	3.	13.40	2.	10.	2.	1.	CHERRY HILL	NJ	8034
44	3.	10.11	3.	14.	1.	1.	VOORHEES	NJ	8043
45	4.	13.02	1.	9.	2.	1.	WILLINGBORO	NJ	8046
46	4.	12.19	1.	9.	2.	1.	PENNSVILLE	NJ	8070
47	3.	11.50	3.	14.	1.	1.	RUNNEMEDE	NJ	8078
48	4.	12.70	1.	9.	2.	1.	THOROFARE	NJ	8086
49	1.	17.35	9.	5.	2.	1.	WESTMONT	NJ	8108

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 50   4.   14.[illegible]  [illegible]  [illegible]  2.   1.   N WILDWOOD          NJ    8260
 51   3.   10.[illegible]  [illegible]  14.   1.   1.   PENNINGTON          NJ    8534
 52   2.   10.37    2.   11.   1.   1.   TRENTON             NJ    8619
 53   2.   11.[illegible]  [illegible]  15.   2.   1.   TRENTON             NJ    8628
 54   1.   14.75    9.    6.   2.   1.   LAKEWOOD            NJ    8701
 55   1.   13.20    7.    9.   2.   1.   WHITING             NJ    8759
 56   4.   11.32    3.   14.   3.   1.   PARLIN              NJ    8859
 57   4.   11.34    3.   14.   2.   1.   N BRUNSWICK         NJ    8902
 58   4.    9.[illegible]   1.    9.   2.   1.   NEW YORK CITY       NY   10003
 59   3.    9.04    3.   14.   1.   1.   NEW YORK            NY   10023
 60   3.   12.40   11.    5.   1.   1.   NEW YORK            NY   10024
 61   2.    9.13    2.   11.   1.   1.   STATEN ISLAND       NY   10307
 62   4.   14.45    9.    9.   4.   1.   SCARSDALE           NY   10583
 63   1.   20.61    8.    3.   3.   1.   SCARSDALE           NY   10583
 64   3.   11.70    2.   10.   2.   1.   YONKERS             NY   10710
 65   4.   14.40    9.    9.   4.   1.   HIGHLAND FALL       NY   10928
 66   5.   13.05    3.   15.   2.   1.   MIDDLETOWN          NY   10940
 67   3.   15.[illegible]   2.   10.   2.   1.   MONROE              NY   10950
 68   2.   13.1[illegible]   6.    9.   1.   1.   GREAT NECK          NY   11020
 69   4.   13.[illegible]   1.    9.   2.   1.   BROOKLYN            NY   11218
 70   2.   14.94    2.   11.   1.   1.   BAYSIDE             NY   11364
 71   1.   11.34    9.    9.   2.   1.   FLUSHING            NY   11367
 72   3.   11.[illegible]   5.   14.   2.   1.   BROOKVILLE          NY   11545
 73   4.    9.84    1.    9.   2.   1.   N MERRICK           NY   11566
 74   3.    7.88    5.   14.   2.   1.   VALLEY STREAM       NY   11581
 75   3.   10.74    5.   14.   2.   1.   EAST WILLISTON      NY   11596
 76   6.    9.18    5.   15.   2.   1.   WILLISTON PK        NY   11596
 77   4.   10.[illegible]   1.   10.   4.   1.   BELLMORE            NY   11710
 78   4.   10.7[illegible]   4.    9.   2.   1.   CENTRAL ISLIP       NY   11722
 79   4.   11.[illegible]   3.   14.   2.   1.   DEER PARK           NY   11729
 80   3.   14.04    2.   1[illegible].   2.   1.   EAST NORTHPORT      NY   11731
 81   1.   11.75    2.    9.   4.   1.   SMITHTOWN           NY   11787
 82   3.   12.[illegible]   2.   10.   2.   1.   HICKSVILLE          NY   11801
 83   4.   10.[illegible]   1.    9.   2.   1.   HICKSVILLE          NY   11801
 84   3.   13.71    3.   14.   1.   1.   DELMAR              NY   12054
 85   2.   12.20    2.   12.   2.   1.   MIDDLEBURG          NY   12122
 86   1.   12.36    2.    9.   4.   1.   ALBANY              NY   12203
 87   2.   11.33    2.   12.   2.   1.   ALBANY              NY   12203
 88   2.   12.52    2.   11.   1.   1.   HYDE PARK           NY   12538
 89   3.   12.89    2.   10.   2.   1.   RHINEBECK           NY   12572
 90   4.   11.57    3.   14.   2.   1.   WALDEN              NY   12586
 91   1.    9.73    2.    9.   4.   1.   AUBURN              NY   13021
 92   3.   12.97    3.   14.   1.   1.   CLAY                NY   13041
 93   3.   14.34    5.   14.   2.   1.   HOMER               NY   13077
 94   3.   11.31    2.   10.   2.   1.   SYRACUSE            NY   13204
 95   4.    6.94    2.   10.   4.   1.   SOLVAY              NY   13209
 96   3.   12.56    2.   14.   1.   1.   ONEIDA              NY   13421
 97   4.   10.87    2.   10.   4.   1.   SHERRILL            NY   13461
 98   3.   11.39    5.   14.   2.   1.   LA FARGEVILLE       NY   13656
 99   1.   11.15    1.    9.   2.   1.   NORWICH             NY   13815
100   4.   16.35    9.    5.   2.   1.   AKRON               NY   14001
101   1.    9.34    2.   12.   2.   1.   EAST CONCORD        NY   14055
102   2.   11.52    2.   11.   1.   1.   FORESTVILLE         NY   14062
103   4.   12.21    1.    9.   2.   1.   HAMBURG             NY   14075
104   2.    9.76    2.   12.   2.   1.   SPRINGVILLE         NY   14141
105   1.    9.45    7.    9.   2.   1.   TONAWANDA           NY   14150
106   3.    8.66    9.    9.   1.   1.   BUFFALO             NY   14211
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107	4.	[illegible]	[illegible]	[illegible]	4.	1.	BUFFALO	NY	14217
108	3.	10.31	[illegible]	14.	1.	1.	SNYDER	NY	14226
109	4.	7.45	2.	[illegible]	4.	1.	AMHERST	NY	14226
110	4.	[illegible]	3.	14.	2.	1.	SNYDER	NY	14226
111	5.	10.79	2.	[illegible]	2.	1.	CHEEKTOWAGA	NY	14227
112	1.	13.11	7.	[illegible]	2.	1.	CHEEKTOWAGA	NY	14227
113	4.	11.27	3.	14.	2.	1.	HILTON	NY	14468
114	3.	12.35	3.	14.	1.	1.	SHORTSVILLE	NY	14548
115	2.	12.?4	2.	11.	1.	1.	SILVER LAKE	NY	14549
116	4.	13.55	2.	10.	4.	1.	WILLIAMSON	NY	14589
117	3.	11.34	3.	14.	1.	1.	ROCHESTER	NY	14605
118	1.	12.15	2.	12.	2.	1.	BELLE VERNON	PA	15012
119	1.	10.51	4.	[illegible]	2.	1.	BETHEL PARK	PA	15102
120	2.	10.34	2.	11.	1.	1.	CARNEGIE	PA	15106
121	6.	14.24	5.	15.	2.	1.	N VERSAILLES	PA	15137
122	2.	9.75	7.	11.	1.	1.	MONROEVILLE	PA	15146
123	1.	9.07	4.	9.	2.	1.	PITTSBURGH	PA	15206
124	3.	13.10	2.	10.	2.	1.	PITTSBURGH	PA	15209
125	1.	10.51	2.	9.	2.	1.	PITTSBURGH	PA	15212
126	1.	9.30	1.	9.	2.	1.	PITTSBURGH	PA	15219
127	2.	8.30	2.	12.	2.	1.	PITTSBURGH	PA	15220
128	2.	9.44	2.	11.	1.	1.	PITTSBURGH	PA	15226
129	3.	10.54	2.	10.	2.	1.	PITTSBURGH	PA	15228
130	2.	9.08	2.	11.	1.	1.	PITTSBURGH	PA	15234
131	1.	13.37	6.	9.	2.	1.	PITTSBURGH	PA	15236
132	2.	10.21	5.	[illegible]	1.	1.	PITTSBURGH	PA	15236
133	4.	11.37	[illegible]	14.	3.	1.	MCMURRAY	PA	15317
134	1.	13.42	2.	12.	2.	1.	BEDFORD	PA	15522
135	2.	9.28	[illegible]	10.	1.	1.	N HUNTINGDON	PA	15642
136	3.	13.55	2.	[illegible]	2.	1.	N HUNTINGTON	PA	15642
137	4.	10.55	[illegible]	14.	3.	1.	INDIANA	PA	15701
138	2.	8.92	3.	9.	1.	1.	NEW CASTLE	PA	16101
139	4.	12.95	6.	14.	3.	1.	NEW CASTLE	PA	16105
140	1.	15.54	9.	9.	2.	1.	SHEFFIELD	PA	16347
141	3.	10.30	2.	10.	2.	1.	ERIE	PA	16510
142	3.	9.44	3.	14.	1.	1.	ALTOONA	PA	16602
143	1.	13.90	9.	9.	2.	1.	GALLITZIN	PA	16641
144	1.	14.06	11.	8.	1.	1.	EAST WATERFOR	PA	17021
145	4.	12.49	1.	9.	2.	1.	JONESTOWN	PA	17038
146	1.	11.05	2.	9.	4.	1.	NEW CUMBERLAN	PA	17070
147	3.	14.54	2.	10.	2.	1.	NEW CUMBERLAND	PA	17070
148	1.	11.15	2.	9.	4.	1.	HARRISBURG	PA	17109
149	1.	11.95	7.	9.	2.	1.	HARRISBURG	PA	17109
150	1.	11.31	2.	12.	2.	1.	MERCERSBURG	PA	17236
151	4.	9.34	1.	9.	2.	1.	YORK	PA	17402
152	3.	11.54	2.	[illegible]	2.	1.	YORK	PA	17403
153	6.	9.26	3.	15.	2.	1.	YORK	PA	17403
154	3.	10.36	3.	14.	1.	1.	LANCASTER	PA	17603
155	2.	12.05	6.	4.	1.	1.	SUNBURY	PA	17801
156	1.	13.38	2.	12.	2.	1.	WEST MILTON	PA	17886
157	4.	13.54	[illegible]	9.	2.	1.	NAZARETH	PA	18064
158	3.	12.75	3.	14.	1.	1.	CLARKS SUMMIT	PA	18411
159	1.	13.51	6.	9.	2.	1.	BERWICK	PA	18603
160	1.	11.56	4.	5.	2.	1.	KINGSTON	PA	18704
161	3.	13.16	4.	4.	1.	1.	SWOYERSVILLE	PA	18704
162	2.	11.75	2.	12.	2.	1.	YEADON	PA	19050
163	4.	11.71	1.	9.	2.	1.	HAVERTOWN	PA	19061

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164	1.	[illegible]	[illegible]	[illegible]	2.	1.	SPRINGFIELD	PA	19064
165	3.	[illegible]	7.	[illegible]	[illegible]	1.	SPRINGFIELD	PA	19064
166	3.	[illegible]	[illegible]	[illegible]	2.	1.	NEWTOWN SQUARE	PA	19073
167	4.	[illegible]	[illegible]	[illegible]	4.	1.	NEWTOWN SQUAR	PA	19073
168	1.	[illegible]	[illegible]	9.	2.	1.	PHILA	PA	19111
169	1.	[illegible]	[illegible]	9.	2.	1.	PHILA	PA	19111
170	4.	[illegible]	[illegible]	[illegible]	2.	1.	PHILADELPHIA	PA	19111
171	[illegible]	9.35	[illegible]	9.	2.	1.	PHILADELPHIA	PA	19115
172	5.	[illegible]	3.	14.	1.	1.	PHILADELPHIA	PA	19128
173	1.	[illegible]	2.	9.	4.	1.	PHILADELPHIA	PA	19142
174	1.	[illegible]	2.	9.	2.	1.	PHILADELPHIA	PA	19151
175	1.	[illegible]	11.	3.	1.	1.	LANSDALE	PA	19446
176	1.	13.08	4.	9.	2.	1.	NEWARK	DE	19711
177	4.	[illegible]	[illegible]	10.	2.	1.	CHEVY CHASE	MD	20015
178	3.	10.15	2.	14.	1.	1.	WASHINGTON	DC	20020
179	3.	13.94	3.	14.	1.	1.	OXON HILL	MD	20022
180	3.	[illegible]	[illegible]	14.	1.	1.	SUITLAND	MD	20023
181	4.	9.57	9.	9.	2.	1.	DISTRICT HGHT	MD	20027
182	2.	[illegible]	6.	10.	1.	1.	CAMP SPRINGS	MD	20031
183	2.	[illegible]	9.	6.	2.	1.	MARLOW HTS	MD	20031
184	2.	[illegible]	2.	12.	2.	1.	AQUASCO	MD	20608
185	3.	13.36	3.	14.	1.	1.	PINEY POINT	MD	20674
186	2.	[illegible]	8.	9.	1.	1.	GAITHERSBURG	MD	20760
187	1.	15.34	2.	12.	2.	1.	HYATTSVILLE	MD	20782
188	6.	8.23	3.	13.	2.	1.	MT RAINIER	MD	20822
189	3.	13.98	3.	14.	1.	1.	ROCKVILLE	MD	20850
190	4.	11.34	1.	9.	2.	1.	OWINGS MILLS	MD	21117
191	4.	12.78	1.	9.	2.	1.	OWINGS MILLS	MD	21117
192	6.	12.49	3.	15.	2.	1.	BALTIMORE	MD	21153
193	4.	9.54	1.	9.	2.	1.	BALTIMORE	MD	21209
194	2.	[illegible]	2.	12.	2.	1.	BALTIMORE	MD	21222
195	4.	[illegible]	2.	10.	4.	1.	BALTIMORE	MD	21222
196	3.	10.33	2.	14.	1.	1.	BALTIMORE	MD	21223
197	2.	[illegible]	2.	12.	2.	1.	BALTIMORE	MD	21224
198	1.	10.02	1.	9.	2.	1.	BALTIMORE	MD	21229
199	3.	10.94	2.	10.	2.	1.	ANNAPOLIS	MD	21401
200	1.	17.34	6.	10.	4.	1.	ANNAPOLIS	MD	21401
201	3.	14.66	2.	10.	2.	2.	SYKESVILLE	MD	21784
202	3.	13.41	2.	10.	2.	1.	MARDELA SPRINGS	MD	21837
203	3.	11.06	3.	14.	1.	1.	ANNANDALE	VA	22003
204	3.	14.38	1.	10.	2.	1.	MANASSAS	VA	22110
205	1.	18.82	11.	8.	1.	1.	ALEXANDRIA	VA	22304
206	4.	15.94	9.	9.	2.	1.	ALEXANDRIA	VA	22307
207	3.	13.29	2.	10.	2.	1.	WILLIAMSBURG	VA	23185
208	3.	15.54	2.	10.	2.	1.	RICHMOND	VA	23234
209	1.	13.58	6.	9.	2.	1.	VA BEACH	VA	23462
210	2.	13.54	2.	11.	1.	1.	HAMPTON	VA	23669
211	2.	13.26	6.	9.	1.	1.	RICHMOND	VA	23803
212	3.	13.50	3.	14.	1.	1.	ROANOKE	VA	24012
213	3.	10.80	2.	10.	2.	1.	VINTON	VA	24179
214	2.	15.09	1.	9.	1.	1.	HONAKER	VA	24260
215	4.	11.79	1.	10.	2.	1.	WOODLAWN	VA	24381
216	4.	11.49	2.	14.	4.	1.	CHARLESTON	WV	25304
217	1.	16.08	9.	6.	2.	1.	CHARLESTON	WV	25306
218	6.	10.43	5.	15.	2.	1.	LE SAGE	WV	25537
219	1.	10.23	1.	9.	2.	1.	HUNTINGTON	WV	25701
220	3.	8.04	5.	14.	2.	1.	BECKLEY	WV	25801

221	3.	7.24	[illegible]	14.	2.	1.	CLARKSBURG	WV	26301
222	1.	[illegible]	[illegible]	5.	2.	1.	WINSTON SALEM	NC	27106
223	3.	10.17	[illegible]	[illegible]	2.	1.	GREENSBORO	NC	27403
224	4.	[illegible]	[illegible]	[illegible]	2.	1.	GOLDSBORO	NC	27530
225	4.	[illegible]	11.	[illegible]	1.	1.	GOLDSBORO	NC	27530
226	3.	[illegible]	[illegible]	12.	1.	1.	LOUISBURG	NC	27549
227	3.	[illegible]	1.	[illegible]	1.	1.	RALEIGH	NC	27512
228	3.	[illegible]	1.	7.	2.	1.	ROCKY MOUNT	NC	27801
229	3.	[illegible]	3.	14.	1.	1.	ROCKY MOUNT	NC	27801
230	3.	14.41	1.	7.	2.	1.	SALISBURY	NC	28144
231	3.	12.70	1.	9.	1.	1.	CHARLOTTE	NC	28210
232	3.	[illegible]	1.	[illegible]	1.	1.	CHARLOTTE	NC	28211
233	4.	[illegible]	1.	[illegible]	2.	1.	CHARLOTTE	NC	28211
234	2.	[illegible]	1.	9.	1.	1.	TABOR CITY	NC	28463
235	2.	[illegible]	[illegible]	12.	2.	1.	KINSTON	NC	28501
236	2.	[illegible]	2.	[illegible]	1.	1.	JACKSONVILLE	NC	28540
237	2.	[illegible]	1.	9.	1.	1.	SEVEN SPRINGS	NC	28579
238	4.	[illegible]	3.	14.	3.	1.	DOVER	NC	28513
239	2.	[illegible]	7.	12.	1.	1.	STATESVILLE	NC	28677
240	4.	[illegible]	7.	7.	2.	1.	STATESVILLE	NC	28677
241	3.	[illegible]	1.	[illegible]	1.	1.	SYLVA	NC	28779
242	4.	[illegible]	3.	14.	3.	1.	ASHEVILLE	NC	28803
243	1.	[illegible]	4.	[illegible]	2.	1.	CHARLESTON	SC	29407
244	1.	[illegible]	2.	9.	4.	1.	GEORGETOWN	SC	29440
245	2.	[illegible]	1.	9.	1.	1.	SOCIETY HILL	SC	29593
246	3.	[illegible]	1.	[illegible]	1.	1.	GREENVILLE	SC	29607
247	3.	[illegible]	7.	12.	2.	1.	GREENVILLE	SC	29607
248	4.	[illegible]	1.	9.	2.	1.	GREENVILLE	SC	29607
249	3.	[illegible]	1.	14.	1.	1.	EASLEY	SC	29640
250	4.	[illegible]	1.	[illegible]	4.	1.	GREER	SC	29651
251	1.	[illegible]	4.	9.	2.	1.	FORT MILL	SC	29715
252	3.	[illegible]	1.	7.	2.	1.	GRANITEVILLE	SC	29829
253	2.	[illegible]	2.	11.	1.	1.	DECATUR	GA	30034
254	4.	[illegible]	1.	10.	2.	1.	CUMMING	GA	30130
255	3.	[illegible]	2.	[illegible]	2.	1.	DOUGLASVILLE	GA	30134
256	4.	[illegible]	[illegible]	14.	3.	1.	ROME	GA	30161
257	3.	13.17	1.	9.	1.	1.	WACO	GA	30182
258	3.	[illegible]	2.	14.	1.	1.	MC DONOUGH	GA	30253
259	1.	[illegible]	1.	12.	2.	1.	REX	GA	30273
260	3.	[illegible]	1.	12.	1.	1.	ATLANTA	GA	30327
261	3.	13.21	1.	10.	1.	1.	COLLEGE PARK	GA	30349
262	2.	[illegible]	1.	9.	1.	1.	COLLEGE PARK	GA	30349
263	1.	[illegible]	1.	12.	2.	1.	LYONS	GA	30436
264	3.	13.20	2.	10.	2.	1.	STATESBORO	GA	30458
265	1.	[illegible]	1.	9.	1.	1.	SYLVANIA	GA	30467
266	4.	13.14	[illegible]	14.	3.	1.	GAINESVILLE	GA	30501
267	4.	[illegible]	1.	9.	2.	1.	MCCAYSVILLE	GA	30555
268	2.	[illegible]	7.	12.	1.	1.	MARTINEZ	GA	30907
269	3.	[illegible]	1.	7.	2.	1.	SAVANNAH	GA	31401
270	3.	[illegible]	7.	10.	1.	1.	SAVANNAH	GA	31406
271	2.	[illegible]	7.	12.	1.	1.	WAYCROSS	GA	31501
272	2.	[illegible]	4.	9.	1.	1.	BRUNSWICK	GA	31520
273	2.	[illegible]	1.	9.	1.	1.	QUITMAN	GA	31643
274	2.	[illegible]	3.	14.	1.	1.	ALBANY	GA	31707
275	2.	[illegible]	7.	12.	1.	1.	FORT BENNING	GA	31905
276	2.	16.17	7.	12.	1.	1.	FORT BENNING	GA	31905
277	2.	[illegible]	7.	12.	1.	1.	JACKSONVILLE	FL	32210

278	2.	[illegible]	[illegible]	3.	3.	1.	JACKSONVILLE	FL	32210
279	3.	[illegible]	1.	[illegible]	1.	1.	JACKSONVILLE	FL	32210
280	4.	14.50	5.	9.	2.	1.	JACKSONVILLE	FL	32216
281	2.	12.94	7.	12.	1.	1.	JACKSONVILLE	FL	32219
282	3.	13.23	3.	14.	1.	1.	QUINCY	FL	32351
283	2.	11.57	7.	12.	1.	1.	PANAMA CITY	FL	32401
284	2.	[illegible]	[illegible]	12.	1.	1.	PENSACOLA	FL	32508
285	2.	11.54	7.	12.	1.	1.	CRESTVIEW	FL	32536
286	1.	13.45	9.	9.	2.	1.	FT WALTON BCH	FL	32548
287	2.	11.41	3.	14.	1.	1.	GAINESVILLE	FL	32601
288	2.	14.31	7.	12.	1.	1.	INVERNESS	FL	32650
289	2.	15.06	9.	10.	1.	1.	SUMMERFIELD	FL	32691
290	2.	12.21	1.	9.	1.	1.	ALTAMONTE SPG	FL	32701
291	3.	12.79	1.	7.	2.	1.	DELAND	FL	32720
292	6.	10.38	3.	15.	2.	1.	MAITLAND	FL	32751
293	3.	13.56	9.	9.	1.	1.	WINTER PARK	FL	32789
294	2.	11.85	7.	12.	1.	1.	ORLANDO	FL	32806
295	4.	13.75	5.	14.	3.	1.	COCOA	FL	32922
296	2.	11.59	1.	9.	1.	1.	SATELLITE BCH	FL	32937
297	3.	13.44	3.	14.	1.	1.	HOLLYWOOD	FL	33020
298	1.	11.26	6.	9.	4.	1.	MARGATE	FL	33063
299	2.	14.35	9.	9.	1.	1.	POMPANO BEACH	FL	33064
300	3.	16.85	9.	6.	2.	1.	CORAL GABLES	FL	33143
301	3.	10.56	1.	10.	1.	1.	MIAMI BCH	FL	33154
302	3.	13.33	1.	7.	2.	1.	MIAMI	FL	33165
303	6.	12.12	3.	15.	2.	1.	MIAMI	FL	33167
304	4.	9.17	3.	14.	2.	1.	SEA RANCH LKS	FL	33304
305	2.	11.70	1.	9.	1.	1.	LAUD BY SEA	FL	33308
306	3.	12.51	9.	9.	1.	1.	FT LAUDERDALE	FL	33313
307	3.	14.33	1.	7.	2.	1.	SUNRISE	FL	33313
308	1.	11.97	9.	9.	2.	1.	SUNRISE	FL	33313
309	3.	11.27	1.	10.	1.	1.	PLANTATION	FL	33317
310	2.	12.77	7.	12.	1.	1.	W PALM BEACH	FL	33401
311	3.	12.94	1.	7.	2.	1.	W PALM BCH	FL	33405
312	2.	11.59	9.	9.	1.	1.	W PALM BEACH	FL	33405
313	4.	9.85	3.	14.	2.	1.	BOCA RATON	FL	33432
314	2.	14.08	9.	9.	1.	1.	DELRAY BEACH	FL	33444
315	2.	10.54	1.	9.	1.	1.	FORT PIERCE	FL	33450
316	2.	11.85	1.	9.	1.	1.	PALM BEACH	FL	33480
317	6.	9.90	3.	15.	2.	1.	PALM BCH	FL	33480
318	2.	26.55	8.	3.	3.	2.	STUART	FL	33494
319	2.	11.30	1.	9.	1.	1.	BROOKSVILLE	FL	33512
320	2.	12.10	6.	9.	1.	1.	CLEARWATER	FL	33515
321	2.	11.20	6.	6.	2.	1.	CLEARWATER	FL	33515
322	4.	12.51	1.	10.	2.	1.	LARGO	FL	33540
323	1.	12.50	2.	9.	4.	1.	LARGO	FL	33540
324	3.	17.23	1.	7.	2.	1.	NEW PORT RICHEY	FL	33552
325	3.	13.32	2.	10.	2.	1.	PLANT CITY	FL	33566
326	4.	9.95	3.	14.	2.	1.	SARASOTA	FL	33581
327	2.	13.09	2.	11.	1.	1.	TARPON SPG	FL	33589
328	3.	12.83	1.	7.	2.	1.	TAMPA	FL	33606
329	2.	12.11	1.	9.	1.	1.	TAMPA	FL	33615
330	2.	12.33	1.	9.	1.	1.	TEMPLE TER	FL	33617
331	3.	15.35	1.	7.	2.	1.	TAMPA	FL	33617
332	4.	12.82	9.	9.	2.	1.	ST PETERSBURG	FL	33703
333	3.	12.55	2.	10.	2.	1.	ST PETERSBURG	FL	33709
334	3.	13.30	3.	14.	1.	1.	LAKELAND	FL	33803

335	[illegible]	[illegible]	3.	14.	2.	1.	FORT MYERS	FL	33901
336	[illegible]	11.74	[illegible]	15.	2.	1.	LEHIGH ACRES	FL	33936
337	2.	12.45	1.	9.	1.	1.	JEMISON	AL	35085
338	3.	14.70	2.	12.	2.	1.	QUINTON	AL	35130
339	3.	10.32	2.	10.	2.	1.	BIRMINGHAM	AL	35206
340	2.	13.36	2.	10.	2.	1.	BIRMINGHAM	AL	35212
341	3.	11.06	1.	10.	1.	1.	BIRMINGHAM	AL	35215
342	4.	12.10	3.	14.	3.	1.	BIRMINGHAM	AL	35215
343	1.	14.32	7.	9.	2.	1.	BIRMINGHAM	AL	35218
344	4.	10.20	5.	14.	3.	1.	BIRMINGHAM	AL	35235
345	2.	11.75	7.	12.	1.	1.	JASPER	AL	35501
346	4.	13.57	1.	9.	2.	1.	BEAR CREEK	AL	35543
347	2.	13.75	1.	9.	1.	1.	SCOTTSBORO	AL	35768
348	1.	15.50	11.	8.	1.	1.	GADSDEN	AL	35901
349	2.	13.44	1.	10.	1.	1.	EUFAULA	AL	36027
350	3.	14.39	1.	10.	1.	1.	PETREY	AL	36062
351	2.	13.03	1.	9.	1.	1.	MONTGOMERY	AL	36104
352	3.	14.30	2.	10.	2.	1.	MONTGOMERY	AL	36111
353	2.	17.22	1.	9.	1.	1.	ROBERTSDALE	AL	36567
354	6.	11.73	5.	15.	2.	1.	SARALAND	AL	36571
355	3.	13.49	3.	14.	2.	1.	MOBILE	AL	36608
356	4.	14.07	5.	14.	3.	1.	MOBILE	AL	36609
357	2.	11.35	2.	11.	1.	1.	MOBILE	AL	36609
358	3.	13.35	1.	10.	1.	1.	MOBILE	AL	36609
359	1.	13.72	1.	9.	2.	1.	THOMASVILLE	AL	36784
360	2.	14.11	1.	9.	1.	1.	OPELIKA	AL	36801
361	2.	9.95	7.	12.	1.	1.	BELFAST	TN	37019
362	3.	10.90	9.	9.	1.	1.	CLARKSVILLE	TN	37040
363	1.	9.31	2.	12.	2.	1.	HERMITAGE	TN	37076
364	3.	10.34	4.	7.	1.	1.	MC EWEN	TN	37101
365	4.	11.33	3.	14.	3.	1.	OLD HICKORY	TN	37138
366	2.	13.01	7.	12.	1.	1.	NASHVILLE	TN	37211
367	2.	14.33	7.	12.	1.	1.	NASHVILLE	TN	37214
368	3.	11.49	1.	10.	1.	1.	NASHVILLE	TN	37215
369	2.	15.13	1.	5.	4.	1.	NASHVILLE	TN	37215
370	3.	14.01	3.	14.	2.	1.	NASHVILLE	TN	37220
371	1.	15.06	7.	9.	2.	1.	COPPERHILL	TN	37317
372	3.	11.05	1.	10.	1.	1.	CHATTANOOGA	TN	37415
373	4.	9.51	3.	14.	3.	1.	CHATTANOOGA	TN	37415
374	2.	10.50	1.	7.	2.	1.	JOHNSON CITY	TN	37601
375	1.	8.84	1.	9.	2.	1.	BLUFF CITY	TN	37618
376	4.	14.27	9.	9.	2.	1.	JONESBORO	TN	37659
377	1.	11.05	1.	9.	4.	1.	KINGSPORT	TN	37662
378	4.	10.30	1.	9.	2.	1.	POWELL	TN	37849
379	6.	13.75	6.	15.	2.	1.	ROCKWOOD	TN	37854
380	3.	13.12	1.	10.	1.	1.	SEVIERVILLE	TN	37862
381	2.	12.56	2.	10.	2.	1.	KNOXVILLE	TN	37918
382	6.	13.95	5.	15.	2.	1.	MEMPHIS	TN	38115
383	6.	9.30	5.	14.	3.	1.	GREENFIELD	TN	38230
384	2.	12.83	1.	9.	1.	1.	UNION CITY	TN	38261
385	3.	15.49	9.	9.	1.	1.	HUMBOLDT	TN	38343
386	1.	13.26	2.	12.	2.	1.	BELMONT	MS	38827
387	4.	11.03	5.	14.	3.	1.	CANTON	MS	39046
388	1.	21.59	6.	3.	3.	1.	LONG BEACH	MS	39560
389	3.	14.01	1.	10.	1.	1.	EMINENCE	KY	40019
390	1.	9.76	2.	12.	2.	1.	FT KNOX	KY	40121
391	1.	23.24	3.	3.	3.	2.	FORT KNOX	KY	40121

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392   3.    9.[illegible]    4.    10.    1.    1.   LOUISVILLE        KY   40206
393   1.   13.22             5.     9.    2.    1.   LOUISVILLE        KY   40207
394   1.   11.41             7.     4.    2.    1.   LOUISVILLE        KY   40214
395   1.   12.43             9.     9.    2.    1.   LEXINGTON         KY   40504
396   2.   23.[illegible]    8.     3.    3.    2.   LEXINGTON         KY   40504
397   1.   15.[illegible]    9.     8.    2.    1.   CYNTHIANA         KY   41031
398   2.   11.[illegible]    2.    11.    1.    1.   ASHLAND           KY   41101
399   3.   13.44             9.     7.    1.    1.   ASHLAND           KY   41101
400   3.   13.32             2.    10.    2.    1.   ASHLAND           KY   41101
401   2.   12.51             1.    12.    1.    1.   DORTON            KY   41520
402   1.   10.90             9.     9.    2.    1.   BUCKEYE LAKE      OH   43008
403   4.   11.31             2.    10.    4.    1.   COLUMBUS          OH   43214
404   6.    9.47             3.    15.    2.    1.   COLUMBUS          OH   43220
405   1.   15.70            11.     8.    1.    1.   COLUMBUS          OH   43227
406   3.    9.16             5.    14.    2.    1.   COLUMBUS          OH   43230
407   4.   14.05             3.    14.    2.    1.   BRYAN             OH   43506
408   1.   16.55            11.     8.    1.    1.   TOLEDO            OH   43606
409   6.    8.12             5.    15.    2.    1.   ZANESVILLE        OH   43701
410   3.   13.05             2.    10.    2.    1.   FAIRVIEW          OH   43736
411   6.    9.47             3.    15.    2.    1.   COSHOCTON         OH   43812
412   1.   10.51             7.    12.    2.    1.   DILLONVALE        OH   43917
413   1.    7.93             1.     9.    2.    1.   CLEVELAND         OH   44105
414   1.   11.30             9.     6.    2.    1.   LAKEWOOD          OH   44107
415   4.   13.69             2.    10.    4.    1.   LAKEWOOD          OH   44107
416   1.   10.59             1.     9.    2.    1.   CLEVELAND         OH   44109
417   4.   12.75             3.    14.    2.    1.   CLEVELAND         OH   44110
418   4.    8.39             2.    10.    4.    1.   MAYFIELD HEIG     OH   44124
419   4.   10.09             3.    14.    2.    1.   MAYFIELD HTS      OH   44124
420   3.    5.95             9.     6.    2.    1.   MAYFIELD HTS      OH   44124
421   1.   15.19            11.     8.    1.    1.   SEVEN HILLS       OH   44131
422   4.    8.74             5.    14.    3.    1.   SEVEN HILLS       OH   44131
423   4.   15.55             9.     9.    2.    1.   WESTLAKE          OH   44145
424   3.   11.14             5.    14.    2.    1.   KENT              OH   44240
425   1.   13.64             6.    10.    4.    1.   AKRON             OH   44305
426   1.   13.80             2.    12.    2.    1.   AKRON             OH   44310
427   3.   13.23             2.    10.    2.    1.   CORTLAND          OH   44410
428   1.   15.11             6.     9.    2.    1.   HARTVILLE         OH   44632
429   4.   10.41             2.    10.    4.    1.   UNIONTOWN         OH   44685
430   4.   12.31             2.    10.    4.    1.   BUCYRUS           OH   44820
431   2.   14.50             6.    10.    1.    1.   SHELBY            OH   44875
432   4.   12.91             2.    14.    4.    1.   MIDDLETOWN        OH   45042
433   6.   13.33             5.    15.    2.    1.   MIDDLETOWN        OH   45042
434   1.   12.74             1.     9.    4.    1.   MARTINSVILLE      OH   45146
435   3.   11.50             5.    14.    2.    1.   CINCINNATI        OH   45238
436   4.   11.11             5.    14.    3.    1.   ARCANUM           OH   45304
437   4.   11.90             5.    14.    3.    1.   ARCANUM           OH   45304
438   4.   10.35             5.    14.    3.    1.   CONOVER           OH   45317
439   6.   10.09             5.    15.    2.    1.   EATON             OH   45320
440   3.   10.38             5.    14.    2.    1.   GREENVILLE        OH   45331
441   2.   12.42             6.    10.    1.    1.   W CARROLLTON      OH   45449
442   2.   12.64             2.    11.    1.    1.   SPRINGFIELD       OH   45502
443   2.   12.05             2.    12.    2.    1.   PORTSMOUTH        OH   45662
444   1.   13.47             9.     6.    2.    1.   LIMA              OH   45801
445   4.   12.06             2.    10.    4.    1.   LIMA              OH   45801
446   1.    9.05             7.     9.    2.    1.   LIMA              OH   45805
447   1.    9.91             9.     9.    2.    1.   LIMA              OH   45805
448   1.   13.14             2.     9.    4.    1.   SPENCERVILLE      OH   45887
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449	1.	9.76	4.	6.	2.	1.	WAPAKONETA	OH	45895
450	4.	12.51	4.	9.	1.	1.	ANDERSON	IN	46011
451	3.	10.35	5.	14.	2.	1.	ANDERSON	IN	46011
452	4.	11.02	[illegible]	14.	3.	1.	FRANKFORT	IN	46041
453	6.	12.43	5.	15.	2.	1.	LAPEL	IN	46051
454	1.	12.42	1.	9.	2.	1.	CLOVERDALE	IN	46120
455	1.	11.54	1.	9.	4.	1.	INDIANAPOLIS	IN	46200
456	1.	14.49	1.	9.	2.	1.	LAWRENCE	IN	46226
457	2.	15.12	9.	9.	1.	1.	INDIANAPOLIS	IN	46226
458	4.	11.47	3.	14.	2.	1.	INDIANAPOLIS	IN	46227
459	4.	12.07	2.	10.	4.	1.	INDIANAPOLIS	IN	46229
460	4.	13.00	9.	9.	4.	1.	INDIANAPOLIS	IN	46234
461	2.	12.99	6.	10.	1.	1.	INDIANAPOLIS	IN	46241
462	4.	14.09	2.	10.	4.	1.	CEDAR LAKE	IN	46303
463	4.	13.03	7.	9.	4.	1.	CROWN POINT	IN	46307
464	4.	9.05	3.	14.	2.	1.	VALPARAISO	IN	46383
465	4.	10.53	9.	9.	4.	1.	GARY	IN	46404
466	6.	9.52	3.	15.	2.	1.	ELKHART	IN	46514
467	4.	11.06	2.	10.	4.	1.	GOSHEN	IN	46526
468	3.	9.60	5.	14.	2.	1.	MISHAWAKA	IN	46544
469	3.	15.88	9.	8.	2.	1.	SOUTH BEND	IN	46616
470	1.	13.09	9.	9.	2.	1.	AUBURN	IN	46706
471	4.	12.21	2.	10.	4.	1.	DECATUR	IN	46733
472	2.	12.17	6.	10.	1.	1.	FORT WAYNE	IN	46815
473	4.	9.05	2.	10.	4.	1.	GALVESTON	IN	46932
474	1.	14.03	11.	8.	1.	1.	LOGANSPORT	IN	46947
475	6.	11.29	3.	15.	2.	1.	MARION	IN	46952
476	2.	13.59	1.	9.	1.	1.	MARION	IN	46952
477	4.	12.01	5.	14.	3.	1.	COLUMBUS	IN	47201
478	4.	9.85	2.	14.	4.	1.	UNION CITY	IN	47390
479	2.	12.33	2.	12.	2.	1.	BLOOMINGTON	IN	47401
480	3.	18.10	1.	7.	2.	1.	BLOOMINGTON	IN	47401
481	4.	12.06	3.	14.	2.	1.	MITCHELL	IN	47446
482	3.	12.60	5.	14.	2.	1.	CRAWFORDSVILLE	IN	47933
483	1.	14.49	6.	9.	2.	1.	EAST DETROIT	MI	48021
484	3.	11.45	2.	14.	2.	1.	E DETROIT	MI	48021
485	4.	10.70	2.	10.	4.	1.	PONTIAC	MI	48055
486	6.	12.12	3.	15.	2.	1.	PT HURON	MI	48060
487	1.	12.55	1.	9.	2.	1.	ROCHESTER	MI	48063
488	2.	19.28	8.	3.	3.	1.	ROCHESTER	MI	48063
489	3.	20.53	11.	5.	1.	1.	BERKLEY	MI	48072
490	4.	11.15	2.	10.	4.	1.	ROYAL OAK	MI	48073
491	2.	12.20	6.	9.	1.	1.	SOUTHFIELD	MI	48076
492	4.	14.54	9.	7.	2.	1.	STERLING HEIG	MI	48077
493	1.	17.23	11.	8.	1.	1.	TROY	MI	48084
494	2.	12.73	7.	12.	1.	1.	TROY	MI	48084
495	4.	12.69	2.	14.	4.	1.	TROY	MI	48084
496	3.	16.30	11.	5.	1.	1.	UNION LAKE	MI	48085
497	2.	15.42	6.	9.	1.	1.	UNION LAKE	MI	48085
498	4.	11.95	3.	14.	2.	1.	ANN ARBOR	MI	48104
499	4.	11.22	2.	10.	4.	1.	DEARBORN	MI	48128
500	4.	12.50	9.	5.	1.	1.	LIVONIA	MI	48152
501	4.	13.79	2.	10.	4.	1.	LIVONIA	MI	48154
502	1.	19.51	11.	8.	1.	2.	LIVONIA	MI	48154
503	2.	12.00	6.	10.	1.	1.	WHITMORE LAKE	MI	48189
504	3.	10.54	5.	14.	2.	1.	YPSILANTI	MI	48197
505	1.	10.28	2.	9.	4.	1.	DETROIT	MI	48214

506	2.	[illegible]	5.	4.	1.	1.	DETROIT	MI	48234
507	1.	[illegible]	1.	4.	2.	1.	GROSSE PTE WD	MI	48236
508	4.	12.35	9.	5.	2.	1.	GROSSE PTE WD	MI	48236
509	4.	12.03	3.	14.	2.	1.	GROSS PTE	MI	48236
510	2.	11.06	6.	9.	1.	1.	OAK PARK	MI	48237
511	5.	4.76	9.	15.	2.	1.	DETROIT	MI	48238
512	1.	11.96	2.	12.	2.	1.	DETROIT	MI	48239
513	1.	20.34	11.	8.	3.	1.	DETROIT	MI	48239
514	2.	14.21	7.	12.	1.	1.	DETROIT	MI	48239
515	2.	11.92	7.	12.	1.	1.	DETROIT	MI	48239
516	2.	13.40	7.	12.	1.	1.	DETROIT	MI	48239
517	2.	13.49	7.	12.	1.	1.	REDFORD	MI	48239
518	3.	14.07	9.	9.	1.	1.	DETROIT	MI	48239
519	2.	14.55	4.	7.	1.	1.	FENTON	MI	48430
520	4.	11.29	2.	10.	4.	1.	FLUSHING	MI	48433
521	4.	11.53	2.	10.	4.	1.	GRAND BLANC	MI	48439
522	4.	16.37	9.	5.	2.	1.	FLINT	MI	48507
523	1.	13.57	7.	9.	2.	1.	SAGINAW	MI	48603
524	1.	12.33	9.	6.	2.	1.	SAGINAW	MI	48603
525	2.	14.06	6.	10.	1.	1.	BAY PORT	MI	48720
526	4.	16.33	9.	5.	2.	1.	BRIDGEPORT	MI	48722
527	4.	11.57	2.	10.	4.	1.	REESE	MI	48757
528	3.	12.00	5.	14.	2.	1.	SILVERWOOD	MI	48760
529	1.	14.23	9.	9.	2.	2.	ITHACA	MI	48847
530	4.	11.54	3.	14.	2.	1.	MASON	MI	48854
531	1.	10.26	5.	9.	2.	1.	LANSING	MI	48915
532	4.	9.79	3.	14.	2.	1.	KALAMAZOO	MI	49008
533	4.	12.49	3.	15.	2.	1.	COLDWATER	MI	49036
534	4.	10.55	5.	14.	3.	1.	PAW PAW	MI	49079
535	1.	10.14	6.	6.	2.	1.	PAW PAW	MI	49079
536	5.	12.59	3.	15.	2.	1.	STURGIS	MI	49091
537	1.	13.22	6.	9.	2.	1.	BROOKLYN	MI	49230
538	2.	17.55	6.	9.	1.	1.	COOPERSVILLE	MI	49404
539	1.	11.57	7.	9.	2.	1.	MUSKEGON HTS	MI	49444
540	4.	9.32	2.	10.	4.	1.	GRAND RAPIDS	MI	49505
541	4.	11.76	2.	10.	4.	1.	GRAND RAPIDS	MI	49505
542	4.	14.17	2.	10.	4.	1.	GRAND RAPIDS	MI	49507
543	4.	10.03	2.	10.	4.	1.	GRAND RAPIDS	MI	49507
544	4.	10.05	3.	14.	2.	1.	GRAND RAPIDS	MI	49508
545	1.	12.49	2.	12.	2.	1.	BLAIRSBURG	IA	50034
546	1.	19.94	8.	3.	3.	1.	INDIANOLA	IA	50125
547	1.	13.78	3.	3.	3.	1.	MARSHALLTOWN	IA	50158
548	2.	12.89	6.	10.	1.	1.	DES MOINES	IA	50317
549	2.	15.19	9.	7.	1.	1.	DES MOINES	IA	50322
550	1.	14.06	9.	8.	2.	1.	DES MOINES	IA	50322
551	1.	10.07	9.	9.	2.	1.	FORT DODGE	IA	50501
552	1.	10.58	1.	12.	4.	1.	GOWRIE	IA	50543
553	2.	21.37	8.	3.	3.	2.	CEDAR FALLS	IA	50613
554	3.	11.83	5.	14.	2.	1.	SPIRIT LAKE	IA	51360
555	3.	10.43	5.	14.	2.	1.	COUNCIL BLUFFS	IA	51501
556	3.	14.62	9.	7.	1.	1.	DELHI	IA	52223
557	1.	12.19	2.	12.	2.	1.	LUZERNE	IA	52257
558	2.	21.33	8.	3.	3.	2.	CEDAR RAPIDS	IA	52402
559	2.	17.26	6.	3.	3.	1.	CEDAR RAPIDS	IA	52402
560	1.	12.58	1.	9.	2.	1.	MONTROSE	IA	52639
561	3.	13.11	5.	14.	2.	1.	DE WITT	IA	52742
562	4.	10.82	9.	9.	4.	1.	CEDARBURG	WI	53012

563	3.	20.91	5.	3.	3.	1.	FRANKLIN	WI	53132
564	2.	12.51	2.	12.	2.	1.	FRANKLIN	WI	53132
565	1.	21.22	3.	3.	3.	2.	KANSASVILLE	WI	53139
566	4.	11.32	2.	10.	4.	1.	KENOSHA	WI	53140
567	3.	14.15	7.	5.	2.	1.	MILWAUKEE	WI	53207
568	2.	16.16	1.	5.	2.	1.	MILWAUKEE	WI	53207
569	1.	15.77	11.	5.	1.	1.	WEST ALLIS	WI	53227
570	2.	14.69	5.	12.	4.	2.	MILWAUKEE	WI	53227
571	4.	12.31	5.	10.	4.	1.	MONTFORT	WI	53569
572	4.	13.27	7.	7.	4.	1.	MADISON	WI	53711
573	4.	12.45	2.	10.	4.	1.	SHAWANO	WI	54166
574	3.	13.41	2.	14.	2.	1.	GREEN BAY	WI	54301
575	4.	11.59	2.	10.	4.	1.	MEDINA	WI	54951
576	2.	12.72	2.	12.	2.	1.	ST PAUL	MN	55113
577	1.	15.72	0.	9.	2.	1.	W ST PAUL	MN	55118
578	1.	13.77	9.	5.	2.	1.	MINNEAPOLIS	MN	55416
579	1.	14.44	5.	3.	3.	1.	ROBBINSDALE	MN	55422
580	4.	13.75	7.	5.	2.	1.	MINNEAPOLIS	MN	55427
581	3.	12.24	5.	14.	2.	1.	MINNEAPOLIS	MN	55441
582	2.	20.31	11.	5.	1.	1.	PLYMOUTH	MN	55441
583	4.	12.31	4.	9.	2.	1.	DULUTH	MN	55811
584	1.	4.30	7.	9.	2.	1.	ROCHESTER	MN	55901
585	4.	13.52	9.	9.	4.	1.	ROCHESTER	MN	55901
586	2.	14.11	7.	5.	2.	1.	LAKEFIELD	MN	56150
587	1.	12.01	2.	9.	4.	1.	HAYTI	SD	57241
588	3.	14.80	3.	3.	3.	2.	FARGO	ND	58102
589	4.	4.74	3.	14.	2.	1.	NEW SALEM	ND	58563
590	1.	9.41	7.	12.	2.	1.	BILLINGS	MT	59101
591	1.	15.16	4.	3.	3.	2.	HELENA	MT	59601
592	5.	10.48	5.	14.	2.	1.	ARLINGTON HTS	IL	60004
593	4.	12.22	2.	14.	4.	1.	ARLINGTIN HTS	IL	60004
594	4.	11.44	3.	14.	2.	1.	DES PLAINES	IL	60016
595	3.	10.14	3.	14.	1.	1.	DES PLAINES	IL	60016
596	4.	10.95	1.	5.	2.	1.	DES PLAINES	IL	60016
597	3.	11.27	5.	14.	2.	1.	DES PLAINES	IL	60018
598	4.	10.71	2.	13.	4.	1.	HIGHLAND PARK	IL	60035
599	6.	10.68	5.	13.	2.	1.	NORTHBROOK	IL	60062
600	3.	10.54	4.	9.	1.	1.	PARK RIDGE	IL	60068
601	4.	11.34	6.	10.	4.	1.	SKOKIE	IL	60076
602	4.	11.15	5.	14.	3.	1.	SKOKIE	IL	60076
603	1.	10.90	2.	9.	4.	1.	SKOKIE	IL	60076
604	3.	10.61	5.	14.	2.	1.	WAUKEGAN	IL	60085
605	4.	13.64	4.	5.	2.	1.	WAUKGAN	IL	60085
606	4.	11.46	4.	9.	4.	1.	WINNETKA	IL	60093
607	3.	11.10	5.	14.	2.	1.	BARTLETT	IL	60103
608	4.	11.39	3.	14.	2.	1.	BELLWOOD	IL	60104
609	6.	12.35	3.	15.	2.	1.	ELGIN	IL	60120
610	4.	9.34	3.	14.	2.	1.	ELMHURST	IL	60126
611	4.	11.59	3.	14.	2.	1.	ELMHURST	IL	60126
612	4.	10.30	3.	14.	2.	1.	SCHILLER PK	IL	60176
613	3.	11.45	5.	14.	2.	1.	W CHICAGO	IL	60185
614	1.	13.12	2.	9.	4.	1.	WHEATON	IL	60187
615	3.	10.71	3.	14.	1.	1.	WHEATON	IL	60187
616	4.	10.71	5.	14.	3.	1.	WINFIELD	IL	60190
617	2.	12.32	4.	9.	1.	1.	WINFIELD	IL	60190
618	4.	12.59	9.	9.	2.	1.	BERWYN	IL	60402
619	3.	11.13	9.	7.	1.	1.	CALUMET CITY	IL	60409

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620   4.   [illegible]   [illegible]  10.   4.   1.   CALUMET CITY      IL   60409
621   4.   [illegible]   3.           14.   2.   1.   GLENWOOD          IL   60425
622   1.   12.21         2.            9.   4.   1.   LANSING           IL   60438
623   4.   [illegible]   [illegible]  14.   2.   1.   LANSING           IL   60438
624   1.   12.50         [illegible]   9.   4.   1.   NEW LENOX         IL   60451
625   4.   [illegible]   [illegible]  10.   4.   1.   NEW LENOX         IL   60451
626   4.    7.77         3.           14.   2.   1.   OAK LAWN          IL   60453
627   4.   14.10         9.   [illegible]   2.   1.   PALOS PK          IL   60464
628   4.   [illegible]   2.           10.   4.   1.   PARK FOREST       IL   60466
629   2.   13.08         6.           10.   1.   1.   AURORA            IL   60506
630   4.   10.29         3.           14.   2.   1.   WOODRIDGE         IL   60515
631   4.   [illegible]   3.           14.   2.   2.   DOWNERS GROVE     IL   60515
632   1.   15.50         6.            6.   4.   1.   DOWNERS GROVE     IL   60515
633   3.   [illegible]   [illegible]  10.   1.   1.   WOODRIDGE         IL   60515
634   4.    8.49         3.           14.   2.   1.   LAGRANGE PARK     IL   60525
635   4.   10.33         3.           14.   2.   1.   LAGRANGE          IL   60525
636   3.   17.23        11.            5.   1.   1.   LA GRANGE         IL   60525
637   4.   14.33         2.           10.   4.   1.   NAPERVILLE        IL   60540
638   1.   14.17         9.            8.   2.   1.   NAPERVILLE        IL   60540
639   4.    9.07         3.           14.   2.   1.   CHICAGO           IL   60602
640   1.    8.96         2.            9.   4.   1.   CHICAGO           IL   60607
641   2.   10.73         8.            3.   3.   1.   CHICAGO           IL   60607
642   1.   10.16         2.           12.   4.   1.   CHICAGO           IL   60608
643   4.    8.35         3.           14.   2.   1.   CHICAGO           IL   60608
644   1.   18.30         9.            3.   3.   1.   CHICAGO           IL   60614
645   4.   10.59         3.           14.   2.   1.   CHICAGO           IL   60626
646   1.   11.07         1.            9.   2.   1.   CHICAGO           IL   60626
647   4.    7.32         3.           14.   2.   1.   CHICAGO           IL   60628
648   4.   11.27         [illegible]  10.   4.   1.   CHICAGO           IL   60629
649   2.   12.11         7.           12.   1.   1.   CHICAGO           IL   60629
650   4.   11.53         2.           10.   4.   1.   CHICAGO           IL   60631
651   4.   10.44         2.           10.   4.   1.   CHICAGO           IL   60634
652   2.   11.89         6.           12.   4.   2.   CHICAGO           IL   60634
653   4.   13.01         2.           10.   4.   1.   CHICAGO           IL   60643
654   1.   13.46         2.            9.   4.   1.   CHICAGO           IL   60645
655   4.    9.61         2.           10.   4.   1.   CHICAGO           IL   60646
656   6.   12.09         5.           15.   2.   1.   LINCOLNWOOD       IL   60646
657   1.   13.21         9.            9.   2.   1.   CHICAGO           IL   60647
658   4.    8.80         2.           10.   4.   1.   CHICAGO           IL   60647
659   3.   10.90         9.           10.   1.   1.   CHICAGO           IL   60656
660   4.   11.47         3.           14.   2.   1.   APPLE RIVER       IL   61001
661   4.   14.07         2.           10.   4.   1.   ROCKFORD          IL   61109
662   3.   13.55         9.            9.   1.   1.   LOVES PARK        IL   61111
663   4.    7.88         2.           10.   4.   1.   ROCK ISLAND       IL   61201
664   2.   11.83         6.           10.   1.   1.   OGLESBY           IL   61348
665   3.   11.38         5.           14.   2.   1.   OGLESBY           IL   61348
666   4.   14.95         9.            9.   2.   1.   GALESBURG         IL   61401
667   1.   14.28         7.            9.   2.   1.   KEWANEE           IL   61443
668   2.   18.50         8.            2.   3.   1.   ROSEVILLE         IL   61473
669   4.   10.75         2.           10.   4.   1.   MORTON            IL   61550
670   3.   15.72         9.            9.   1.   1.   WASHINGTON        IL   61571
671   4.    9.40         2.           10.   4.   1.   PEORIA            IL   61604
672   1.    8.48         2.           13.   4.   1.   PEORIA            IL   61604
673   4.   19.37         2.           10.   4.   1.   PEORIA            IL   61614
674   4.    8.33         2.           10.   4.   1.   BLOOMINGTON       IL   61701
675   1.   19.03         9.            6.   2.   1.   COLFAX            IL   61728
676   1.   10.55         2.            9.   4.   1.   WESTVILLE         IL   61883
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677	4.	13.[illegible]	[illegible]	15.	[illegible]	1.	PARIS	IL	61944
678	1.	13.74	7.	9.	[illegible]	1.	GRANITE CITY	IL	62025
679	1.	11.[illegible]	[illegible]	4.	[illegible]	1.	LITCHFIELD	IL	62056
680	2.	[illegible]	[illegible]	3.	[illegible]	1.	EAST ST LOUIS	IL	62201
681	2.	[illegible]	[illegible]	[illegible]	1.	1.	FAIRMONT CITY	IL	62201
682	1.	32.17	[illegible]	[illegible]	3.	1.	CAVE-IN-ROCK	IL	62919
683	2.	[illegible]	[illegible]	[illegible]	3.	1.	MANCHESTER	MO	63011
684	2.	14.47	[illegible]	[illegible]	3.	1.	BALLWIN	MO	63011
685	9.	11.72	9.	[illegible]	[illegible]	1.	FLORISSANT	MO	63031
686	7.	15.67	[illegible]	3.	2.	2.	WEBSTER GRV	MO	63119
687	2.	13.41	[illegible]	[illegible]	2.	1.	ST LOUIS	MO	63121
688	3.	14.[illegible]	[illegible]	[illegible]	[illegible]	1.	ST CHARLES	MO	63301
689	3.	12.39	[illegible]	10.	2.	1.	KANSAS CITY	MO	64131
690	1.	11.26	7.	13.	2.	1.	KANSAS CITY	MO	64138
691	4.	12.[illegible]	[illegible]	15.	2.	1.	KANSAS CITY	MO	64151
692	1.	12.17	2.	12.	2.	1.	JAMESTOWN	MO	65046
693	7.	13.1[illegible]	7.	5.	2.	1.	KANSAS CITY	KS	66109
694	4.	12.[illegible]	[illegible]	10.	2.	1.	PRAIRIE VILLAGE	KS	66208
695	4.	12.[illegible]	[illegible]	[illegible]	2.	1.	LENEXA	KS	66215
696	4.	[illegible]	[illegible]	[illegible]	[illegible]	1.	WAMEGO	KS	66547
697	3.	14.7[illegible]	[illegible]	7.	[illegible]	1.	TOPEKA	KS	66614
698	1.	14.[illegible]	[illegible]	3.	[illegible]	2.	CHANUTE	KS	66720
699	1.	[illegible].22	7.	9.	2.	1.	COLUMBUS	KS	66725
700	1.	14.44	[illegible]	[illegible]	2.	1.	FREDONIA	KS	66736
701	1.	25.82	[illegible]	3.	3.	2.	EMPORIA	KS	66801
702	1.	10.7[illegible]	[illegible]	12.	2.	1.	BELLE PLAINE	KS	67013
703	1.	11.32	[illegible]	4.	[illegible]	1.	WICHITA	KS	67203
704	3.	13.0[illegible]	4.	5.	4.	2.	WICHITA	KS	67203
705	3.	13.[illegible]	5.	14.	2.	1.	SALINA	KS	67401
706	1.	14.[illegible]	[illegible]	[illegible]	[illegible]	1.	OLMITZ	KS	67564
707	1.	17.74	1.	9.	2.	1.	ZURICH	KS	67676
708	2.	15.11	1.	4.	1.	1.	MC DONALD	KS	67745
709	4.	12.11	8.	5.	2.	1.	OMAHA	NE	68106
710	3.	9.44	5.	14.	2.	1.	LINCOLN	NE	68506
711	4.	12.97	5.	14.	3.	1.	LINCOLN	NE	68506
712	3.	13.[illegible]	4.	7.	1.	1.	COLUMBUS	NE	68601
713	1.	12.39	2.	4.	4.	1.	HAIGLER	NE	69030
714	4.	10.50	3.	14.	2.	1.	METAIRIE	LA	70005
715	2.	12.1[illegible]	9.	9.	1.	1.	NEW ORLEANS	LA	70124
716	2.	8.17	1.	4.	1.	1.	NEW ORLEANS	LA	70126
717	1.	13.[illegible]	2.	12.	2.	1.	LAKE ARTHUR	LA	70549
718	4.	14.91	4.	9.	2.	1.	SULPHUR	LA	70663
719	4.	13.08	9.	9.	2.	1.	BATON ROUGE	LA	70805
720	2.	11.97	9.	9.	1.	1.	BATON ROUGE	LA	70811
721	4.	12.33	3.	14.	2.	1.	SPRINGHILL	LA	71075
722	2.	11.13	6.	12.	1.	1.	SHREVEPORT	LA	71105
723	8.	11.40	3.	15.	2.	1.	WALDO	AR	71770
724	1.	10.2[illegible]	11.	8.	1.	1.	ARKADELPHIA	AR	71923
725	1.	23.8[illegible]	6.	3.	3.	1.	PENCIL BLUFF	AR	71965
726	4.	11.37	5.	14.	3.	1.	JACKSONVILLE	AR	72076
727	2.	12.75	1.	9.	1.	1.	LITTLE ROCK	AR	72207
728	1.	20.49	5.	3.	3.	1.	ALIX	AR	72820
729	3.	14.69	5.	14.	2.	1.	FT SMITH	AR	72901
730	2.	10.67	1.	9.	1.	1.	GUTHRIE	OK	73044
731	1.	15.30	11.	8.	1.	1.	MIDWEST CITY	OK	73110
732	1.	13.11	2.	12.	2.	1.	OKLAHOMA CITY	OK	73112
733	1.	14.09	2.	12.	2.	1.	HEALDTON	OK	73438

734	1.	21.74	[illegible]	[illegible]	4.	[illegible]	OVERBROOK	OK	73453
735	[illegible]	14.[illegible]	7.	12.	2.	1.	GOULD	OK	73544
736	4.	11.55	[illegible]	14.	2.	1.	SEILING	OK	73663
737	2.	12.26	3.	3.	3.	1.	ENID	OK	73701
738	4.	15.01	5.	[illegible]	2.	1.	ENID	OK	73701
739	2.	23.70	[illegible]	3.	3.	2.	BARTLESVILLE	OK	74003
740	1.	12.55	7.	9.	2.	1.	OWASSO	OK	74055
741	2.	13.[illegible]	[illegible]	2.	3.	1.	TULSA	OK	74135
742	2.	11.45	[illegible]	14.	2.	1.	TULSA	OK	74135
743	1.	12.74	[illegible]	9.	4.	1.	NEWKIRK	OK	74647
744	1.	10.47	2.	9.	4.	1.	MEEKER	OK	74855
745	4.	11.21	[illegible]	14.	3.	1.	SEMINOLE	OK	74868
746	6.	10.23	[illegible]	15.	2.	1.	MULDROW	OK	74948
747	3.	12.06	6.	7.	1.	1.	IRVING	TX	75060
748	3.	14.34	5.	14.	2.	1.	CANTON	TX	75103
749	1.	13.02	7.	9.	2.	1.	DESOTO	TX	75115
750	1.	9.45	1.	9.	2.	1.	DALLAS	TX	75209
751	4.	13.14	[illegible]	14.	2.	1.	DALLAS	TX	75228
752	1.	10.71	7.	9.	2.	1.	DALLAS	TX	75229
753	3.	14.32	1.	10.	1.	1.	DALLAS	TX	75231
754	3.	12.72	3.	14.	1.	1.	DALLAS	TX	75231
755	4.	10.50	11.	[illegible]	1.	2.	DALLAS	TX	75231
756	4.	12.50	9.	9.	4.	1.	FT WORTH	TX	76109
757	4.	10.26	5.	15.	2.	1.	FT WORTH	TX	76133
758	1.	14.59	6.	9.	2.	1.	FORT WORTH	TX	76134
759	6.	13.05	3.	15.	2.	1.	FT WORTH	TX	76135
760	2.	[illegible]	9.	9.	1.	1.	SONORA	TX	76950
761	2.	[illegible]	7.	12.	1.	1.	HOUSTON	TX	77015
762	3.	14.46	9.	9.	1.	1.	HOUSTON	TX	77018
763	1.	13.54	7.	12.	2.	1.	HOUSTON	TX	77018
764	1.	13.38	[illegible]	9.	2.	1.	HOUSTON	TX	77036
765	3.	14.14	[illegible]	[illegible]	2.	1.	HOUSTON	TX	77036
766	2.	14.46	9.	9.	1.	1.	HOUSTON	TX	77071
767	2.	11.05	7.	12.	1.	1.	HUNTSVILLE	TX	77340
768	2.	14.91	9.	9.	1.	1.	PORTER	TX	77365
769	2.	12.35	5.	10.	1.	1.	PORTER	TX	77365
770	1.	12.06	7.	9.	2.	1.	EL CAMPO	TX	77437
771	3.	13.58	9.	9.	1.	1.	RICHMOND	TX	77469
772	2.	14.84	1.	9.	1.	1.	CLUTE	TX	77531
773	1.	26.96	8.	3.	3.	2.	FRIENDSWOOD	TX	77546
774	4.	12.71	9.	9.	4.	1.	FRIENDSWOOD	TX	77546
775	2.	14.02	7.	12.	1.	1.	SEABROOK	TX	77586
776	4.	11.86	9.	10.	2.	1.	BEAUMONT	TX	77700
777	1.	14.56	6.	3.	3.	1.	SHINER	TX	77984
778	3.	13.49	9.	9.	1.	1.	LAREDO	TX	78040
779	2.	10.84	9.	9.	1.	1.	SAN ANTONIO	TX	78216
780	3.	16.64	9.	10.	1.	1.	SAN ANTONIO	TX	78218
781	1.	11.01	7.	9.	2.	1.	SAN ANTONIO	TX	78230
782	3.	16.16	4.	6.	2.	1.	SAN ANTONIO	TX	78230
783	4.	13.57	5.	14.	3.	1.	SAN ANTONIO	TX	78230
784	3.	11.36	5.	14.	2.	1.	SAN ANTONIO	TX	78239
785	3.	11.02	5.	14.	2.	1.	SAN ANTONIO	TX	78242
786	4.	11.85	5.	14.	3.	1.	ALICE	TX	78332
787	3.	10.94	5.	14.	2.	1.	PORTLAND	TX	78374
788	4.	12.30	3.	14.	2.	1.	AMARILLO	TX	79109
789	4.	10.33	9.	9.	2.	1.	LUBBOCK	TX	79414
790	4.	8.01	5.	14.	3.	1.	ABILENE	TX	79605

791	[illegible]	[illegible]	[illegible]	[illegible]	2.	1.	EL PASO	TX	79908
792	[illegible]	[illegible]	[illegible]	[illegible]	2.	1.	DENVER	CO	80211
793	[illegible]	[illegible]	[illegible]	[illegible]	1.	1.	STEAMBOAT SPRGS	CO	80477
794	[illegible]	[illegible]	[illegible]	[illegible]	1.	1.	STEAMBOAT SPR	CO	80477
795	[illegible]	11.66	[illegible]	[illegible]	2.	1.	COLORADO SPG	CO	80907
796	[illegible]	[illegible]	[illegible]	[illegible]	3.	2.	PUEBLO	CO	81001
797	[illegible]	[illegible]	[illegible]	[illegible]	2.	1.	CRAIG	CO	81625
798	[illegible]	[illegible]	[illegible]	[illegible]	1.	1.	ROCK SPRINGS	WY	82901
799	[illegible]	20.74	[illegible]	[illegible]	3.	2.	EVANSTON	WY	82930
800	[illegible]	11.27	[illegible]	[illegible]	2.	1.	BOISE	ID	83705
801	[illegible]	[illegible]	[illegible]	[illegible]	2.	1.	CLEARFIELD	UT	84015
802	[illegible]	[illegible]	[illegible]	[illegible]	2.	1.	MURRAY	UT	84107
803	[illegible]	11.73	[illegible]	[illegible]	2.	1.	HYDE PARK	UT	84318
804	[illegible]	[illegible]	[illegible]	[illegible]	3.	2.	PROVO	UT	84601
805	[illegible]	[illegible]	[illegible]	[illegible]	1.	1.	PHOENIX	AZ	85035
806	[illegible]	14.57	[illegible]	[illegible]	4.	1.	MESA	AZ	85205
807	[illegible]	[illegible]	[illegible]	[illegible]	3.	2.	SCOTTSDALE	AZ	85253
808	[illegible]	9.42	[illegible]	[illegible]	3.	1.	YUMA	AZ	85364
809	[illegible]	[illegible]	[illegible]	[illegible]	1.	1.	GLOBE	AZ	85501
810	[illegible]	14.35	[illegible]	[illegible]	2.	1.	BENSON	AZ	85602
811	[illegible]	[illegible]	[illegible]	[illegible]	2.	1.	TUBAC	AZ	85640
812	[illegible]	[illegible]	[illegible]	[illegible]	1.	1.	TUCSON	AZ	85715
813	[illegible]	17.77	[illegible]	[illegible]	3.	1.	LOS ALAMOS	NM	87544
814	[illegible]	20.28	[illegible]	[illegible]	3.	2.	ARTESIA	NM	88210
815	[illegible]	12.26	[illegible]	[illegible]	2.	1.	GLENDALE	NV	89025
816	[illegible]	[illegible]	[illegible]	[illegible]	2.	1.	LAS VEGAS	NV	89109
817	[illegible]	[illegible]	[illegible]	[illegible]	3.	2.	RENO	NV	89507
818	[illegible]	[illegible]	[illegible]	[illegible]	2.	1.	LOS ANGELES	CA	90021
819	[illegible]	[illegible]	[illegible]	[illegible]	4.	1.	LOS ANGELES	CA	90027
820	[illegible]	[illegible]	[illegible]	[illegible]	3.	1.	LOS ANGELES	CA	90049
821	[illegible]	11.87	[illegible]	3.	1.	1.	BELL GARDENS	CA	90201
822	[illegible]	13.97	[illegible]	3.	5.	1.	TORRANCE	CA	90505
823	1.	18.29	[illegible]	3.	3.	1.	LA MIRADA	CA	90638
824	2.	21.39	[illegible]	10.	3.	2.	SAN PEDRO	CA	90731
825	2.	14.35	[illegible]	3.	1.	1.	SAN PEDRO	CA	90731
826	2.	18.97	[illegible]	3.	3.	1.	LONG BEACH	CA	90805
827	1.	18.34	11.	3.	5.	1.	THOUSAND OAKS	CA	91360
828	2.	24.22	8.	3.	3.	2.	THOUSAND OAKS	CA	91360
829	[illegible]	20.73	8.	3.	3.	1.	WOODLAND HLS	CA	91364
830	[illegible]	11.34	9.	10.	1.	1.	SHERMAN OAKS	CA	91403
831	1.	13.23	7.	10.	2.	1.	VAN NUYS	CA	91411
832	3.	13.27	9.	10.	1.	1.	BALDWIN PARK	CA	91706
833	1.	9.38	1.	10.	2.	1.	COVINA	CA	91722
834	2.	17.25	5.	3.	3.	1.	COVINA	CA	91723
835	2.	19.33	6.	3.	3.	2.	LA PUENTE	CA	91746
836	2.	17.12	[illegible]	3.	3.	1.	WEST COVINA	CA	91790
837	1.	12.13	1.	10.	2.	1.	LA JOLLA	CA	92037
838	1.	17.97	8.	3.	3.	1.	LA JOLLA	CA	92037
839	[illegible]	18.74	8.	3.	3.	2.	SPRING VLY	CA	92077
840	1.	13.13	9.	10.	4.	1.	SAN DIEGO	CA	92104
841	[illegible]	21.27	[illegible]	3.	3.	2.	SAN DIEGO	CA	92122
842	3.	11.96	9.	[illegible]	1.	1.	SAN DIEGO	CA	92126
843	[illegible]	20.58	11.	15.	1.	1.	SAN DIEGO	CT	92126
844	1.	14.00	5.	10.	4.	1.	BEAUMONT	CA	92223
845	1.	13.21	1.	12.	2.	1.	YERMO	CA	92311
846	3.	14.37	9.	10.	1.	1.	RIVERSIDE	CA	92504
847	2.	11.80	5.	[illegible]	2.	1.	HUNTINGTON BCH	CA	92646

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848   1.   [illegible]    .    3.   [illegible]  2.   PORT HUENEME      CA   93041
849   2.   [illegible]    [illegible]  11.  [illegible]  1.   LEMOORE     CA   93245
850   5.   12.[illegible] 5.   10.  3.   1.   BAKERSFIELD            CA   93309
851   3.   14.[illegible] 9.   [illegible]  [illegible]  1.   LOS OSOS   CA   93402
852   1.   13.[illegible] [illegible]  [illegible]  [illegible]  1.   GROVER CITY   CA   93433
853   2.   [illegible]    [illegible]  3.   3.   1.   SUNNYVALE          CA   94[illegible]7
854   2.   14.77          [illegible]  3.   [illegible]  1.   SAN FRANCISCO   CA   9411[illegible]
855   3.   14.[illegible] 4.   1[illegible].  1.   1.   SAN FRANCISCO    CA   94134
856   1.   13.[illegible] 7.   1[illegible].  2.   1.   MORAGA           CA   945[illegible]
857   1.   10.[illegible] 7.   1[illegible].  2.   1.   RICHMOND         CA   94806
858   1.   13.[illegible] [illegible]  10.  4.   1.   COTATI           CA   94928
859   2.   1[illegible]   [illegible]  3.   3.   2.   BOULDER CREEK    CA   95006
860   1.   22.[illegible] 8.   3.   3.   2.   SAN JOSE               CA   95119
861   2.   [illegible]    8.   3.   3.   2.   SAN JOSE               CA   95123
862   2.   17.[illegible] 8.   3.   5.   1.   KENWOOD                CA   95452
863   3.    9.37          7.   10.  1.   1.   MAGALIA                CA   95954
864   1.   10.[illegible] 6.   3.   3.   2.   ST HELENS              OR   97051
865   3.   14.[illegible] 9.   7.   1.   1.   PORTLAND               OR   972[illegible]6
866   4.   [illegible]    [illegible]  14.  3.   1.   SALEM          OR   97302
867   1.   21.[illegible] [illegible]  3.   3.   1.   SALEM          OR   97302
868   1.   24.75          [illegible]  3.   3.   1.   SALEM          OR   97303
869   4.   [illegible]    4.   9.   [illegible]  1.   EUGENE         OR   974[illegible]
870   1.   11.[illegible] 6.   3.   4.   1.   BANDON                 OR   97411
871   1.   [illegible]    6.   12.  2.   1.   ROSEBURG               OR   97470
872   1.    9.3[illegible] 1.  4.   4.   1.   BELLEVUE               WA   98006
873   3.   11.74          9.   10.  1.   1.   SEATTLE                WA   98107
874   2.   17.[illegible] [illegible]  3.   3.   2.   SEATTLE        WA   98148
875   1.   15.[illegible] [illegible]  [illegible]  2.   1.   TACOMA WA   98407
876   1.   14.[illegible] [illegible]  1[illegible].  4.   1.   TACOMA   WA   984[illegible]
877   1.   [illegible].47 9.   6.   2.   1.   TACOMA                 WA   98455
878   3.   12.[illegible] 4.   7.   1.   1.   HONOLULU               HI   96815
879   1.   17.[illegible] [illegible]  3.   3.   1.   YAKIMA         WA   98902
880   1.   14.[illegible] [illegible]  [illegible]  3.   1.   CHEWELAH   WA   99109
881   1.   24.[illegible] 8.   3.   3.   2.   SPOKANE                WA   99207
882   4.   10.5[illegible] 5.  14.  3.   1.   SPOKANE                WA   99208
883   3.   10.2[illegible] 7.  10.  1.   1.   OTHELLO                WA   99344
884   1.   13.35          1.   9.   2.   1.   JUNEAU                 AK   99802
885   3.   14.52          9.   6.   2.   1.   AMHERST                MA    1002
886   1.   11.[illegible] 2.   12.  4.   1.   SPRINGFIELD            MA    1119
887   4.   14.55          1.   10.  2.   1.   GREENFIELD             MA    1301
888   2.   10.45          7.   12.  1.   1.   FRAMINGHAM             MA    1701
889   3.   19.00         11.   5.   1.   1.   FRAMINGHAM             MA    1701
890   3.   18.93          9.   7.   1.   1.   CHELMSFORD             MA    1824
891   3.   14.02          2.   10.  2.   1.   METHUEN                MA    1844
892   4.   19.44          9.   5.   2.   1.   LOWELL                 MA    1851
893   2.   13.38          9.   6.   2.   1.   SAUGUS                 MA    1906
894   1.   12.99          1.   9.   2.   1.   MEDFIELD               MA    2052
895   3.    9.71          2.   11.  1.   1.   ALLSTON                MA    2134
896   1.   14.10          9.   8.   2.   1.   CAMBRIDGE              MA    2139
897   3.   15.35          9.   7.   1.   1.   BELMONT                MA    2178
898   2.   15.54         11.   5.   1.   2.   NEEDHAM                MA    2194
899   3.   14.35          2.   10.  2.   1.   HALIFAX                MA    2338
900   4.   14.[illegible] 1.   9.   2.   1.   HANOVER                MA    2339
901   1.   19.5[illegible] 8.  2.   3.   1.   HOLBROOK               MA    2343
902   2.   20.38          8.   3.   3.   1.   WEST YARMOUTH          MA    2673
903   1.   22.81          8.   3.   3.   1.   GREENVILLE             RI    2828
904   1.   12.90          7.   9.   2.   1.   LINCOLN                RI    2865
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905   4.   11.15   2.  14.   3.   1.   WARWICK          RI   2886
906   5.    4.25   5.  10.   2.   1.   WARWICK          RI   2888
907   2.   24.21   3.   3.   3.   1.   RIVERSIDE        RI   2915
908   3.   11.53   6.  14.   2.   1.   CHESTER          NH   3036
909   4.   24.32  11.   5.   1.   1.   NASHUA           NH   3060
910   3.   14.05   3.  10.   2.   1.   MANCHESTER       NH   3102
911   4.   11.13   1.  14.   2.   1.   MANCHESTER       NH   3104
912   2.   14.47   5.  12.   4.   2.   PLYMOUTH         NH   3264
913   2.   20.22   5.   3.   3.   2.   CUNDYS HARBOR    ME   4011
914   1.   19.23   9.   5.   2.   1.   LIMERICK         ME   4048
915   4.   17.52   9.   6.   2.   1.   SANFORD          ME   4073
916   1.   15.45   6.   4.   4.   1.   E STONEHAM       ME   4231
917   4.   17.75   4.   2.   2.   1.   LIVERMORE FAL    ME   4254
918   4.   10.40   8.  14.   2.   1.   BARRE            VT   5641
919   1.   15.47   4.   5.   4.   2.   VERNON           CT   6066
920   2.   21.47   1.   3.   3.   1.   COLUMBIA         CT   6237
921   3.   11.52   7.  12.   1.   1.   NEW LONDON       CT   6320
922   3.   24.15   5.   3.   3.   2.   GALES FERRY      CT   6335
923   1.   20.45  11.   3.   3.   1.   GROTON           CT   6340
924   1.   17.21   8.   3.   3.   1.   NORWICH          CT   6360
925   1.   15.54   9.   7.   3.   1.   SOUTHBURY        CT   6488
926   2.   14.73   6.  14.   1.   1.   WALLINGFORD      CT   6492
927   4.   13.72   4.   4.   2.   1.   WOODBRIDGE       CT   6525
928   3.   14.34   4.   5.   2.   1.   BRIDGEPORT       CT   6610
929   4.   15.90   9.   7.   4.   1.   BRIDGEPORT       CT   6610
930   2.   16.30   5.   3.   3.   1.   RIDGEFIELD       CT   6877
931   2.   13.54   9.  14.   1.   1.   ESSEX FELLS      NJ   7021
932   3.   12.47   9.   7.   1.   1.   VERONA           NJ   7044
933   4.    4.58   3.  15.   2.   1.   VERONA           NJ   7044
934   2.   11.55   1.  12.   1.   1.   ORANGE           NJ   7050
935   3.   15.27   2.  10.   2.   1.   SHORT HILLS      NJ   7078
936   4.   16.35  12.   5.   4.   1.   UNION            NJ   7083
937   3.   13.15   2.  10.   5.   1.   WESTFIELD        NJ   7090
938   4.   12.76   1.   4.   2.   1.   LITTLE FALLS     NJ   7424
939   2.   19.40   9.   5.   2.   1.   OAKLAND          NJ   7436
940   2.   10.45   9.   6.   2.   1.   WAYNE            NJ   7470
941   6.   13.56   3.  15.   2.   1.   WYCKOFF          NJ   7481
942   1.   15.44   5.   4.   2.   2.   PATERSON         NJ   7503
943   4.   15.29   1.   5.   2.   1.   PATERSON         NJ   7504
944   1.   11.10   2.   4.   4.   1.   HAWTHORNE        NJ   7506
945   1.   15.46   5.   3.   3.   1.   MONTVALE         NJ   7645
946   4.   15.59  11.   5.   1.   1.   NEW MILFORD      NJ   7646
947   4.   16.20   4.   7.   2.   1.   PARAMUS          NJ   7652
948   1.   18.79  11.   8.   1.   2.   ATLANTIC HGHL    NJ   7716
949   1.   15.44  11.   8.   1.   1.   LINCROFT         NJ   7738
950   3.   13.49   2.  10.   2.   1.   LINCROFT         NJ   7738
951   4.   10.72   5.  14.   3.   1.   MORRISTOWN       NJ   7960
952   2.   31.56   8.   3.   3.   2.   MULLICA HILL     NJ   8062
953   4.    9.37   3.  14.   2.   1.   TOMS RIVER       NJ   8753
954   1.   16.33   9.   6.   2.   1.   STATEN ISLAND    NY  10309
955   4.   13.91   9.   5.   4.   1.   BRONX            NY  10466
956   6.    9.21   3.  15.   2.   1.   NEW YORK         NY  10467
957   3.   15.60   9.   7.   1.   1.   MT VERNON        NY  10552
958   4.    7.54   1.   9.   2.   1.   NEW ROCHELLE     NY  10801
959   1.   16.00   6.  10.   4.   1.   BROOKLYN         NY  11201
960   4.    7.53   2.  14.   3.   1.   BROOKLYN         NY  11208
961   4.    8.96   3.  14.   2.   1.   WHITESTONE       NY  11357
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 962    2.    11.34    7.   12.    1.    1.   ELMHURST          NY   11373
 963    2.    11.24    1.    9.    1.    1.   MINEOLA           NY   11501
 964    1.    15.55   11.    5.    1.    1.   WOODMERE          NY   11598
 965    1.    17.12    9.    8.    2.    1.   BETHPAGE          NY   11714
 966    4.    11.52    2.   10.    4.    1.   N MASSAPEQUA      NY   11758
 967    4.    16.24    9.    5.    2.    1.   JERICHO           NY   11793
 968    4.    22.[illegible]   11.    5.    1.    2.   C MORICHES        NY   11934
 969    4.    12.14    3.   14.    2.    1.   REXFORD           NY   12148
 970    1.    11.91    9.    9.    2.    1.   PT JERVIS         NY   12771
 971    2.    11.99    2.   11.    1.    1.   LIVERPOOL         NY   13088
 972    1.    22.72    5.    3.    3.    1.   SYR               NY   13205
 973    1.    17.56    9.    6.    2.    1.   SYRACUSE          NY   13207
 974    1.    13.90    1.    9.    2.    1.   AFTON             NY   13730
 975    4.    15.01    1.   10.    4.    1.   BATAVIA           NY   14020
 976    3.    12.16    2.   10.    2.    1.   LEWISTON          NY   14092
 977    1.    15.77    6.    6.    2.    1.   LOCKPORT          NY   14094
 978    1.    15.80   11.    8.    3.    1.   LOCKPORT          NY   14094
 979    3.    14.27    1.    7.    2.    1.   KENMORE           NY   14223
 980    3.    16.34    9.    6.    2.    1.   NIAGARA FALLS     NY   14304
 981    1.    16.25    9.    5.    2.    1.   CANANDAIGUA       NY   14424
 982    3.    18.19    9.    6.    2.    1.   CLYDE             NY   14433
 983    1.    26.25    5.    3.    3.    2.   HENRIETTA         NY   14467
 984    2.    10.74    6.    9.    1.    1.   PITTSFORD         NY   14534
 985    1.    22.66    8.    2.    3.    2.   ROCH              NY   14613
 986    3.    13.65    9.    7.    1.    1.   ROCHESTER         NY   14617
 987    1.    14.63    1.    9.    2.    1.   ROCHESTER         NY   14624
 988    4.    15.35    9.    5.    2.    1.   ROCHESTER         NY   14624
 989    1.    19.77    1.    5.    2.    1.   CUBA              NY   14727
 990    4.    13.22    1.    9.    2.    1.   CORNING           NY   14830
 991    4.    13.31    9.    6.    4.    1.   PINE CITY         NY   14871
 992    2.    12.97    9.    7.    1.    1.   BEAVER FALLS      PA   15010
 993    4.    16.42   11.    5.    1.    2.   BEAVER FALLS      PA   15010
 994    2.    12.18    9.    9.    1.    1.   CLAIRTON          PA   15025
 995    3.    12.74    9.    8.    2.    1.   NATRONA HEIGHTS   PA   15065
 996    2.    13.17    9.    7.    1.    1.   OAKDALE           PA   15071
 997    3.    11.50    2.   10.    2.    1.   GLENSHAW          PA   15116
 998    2.    11.44    1.    9.    1.    1.   MUNHALL           PA   15120
 999    1.    20.16    8.    3.    3.    1.   SEWICKLEY         PA   15143
1000    3.    10.98    9.    7.    1.    1.   PITTSBURGH        PA   15227
1001    2.    18.49    9.    6.    4.    2.   PITTSBURGH        PA   15235
1002    3.    17.13    2.   10.    2.    1.   PITTSBURGH        PA   15243
1003    1.    19.83   11.    8.    1.    2.   WASHINGTON        PA   15301
1004    2.    15.20    7.   12.    1.    1.   HOUSTON           PA   15342
1005    2.    18.43    8.    3.    3.    1.   DELMONT           PA   15626
1006    3.    13.59    2.   14.    2.    1.   LATROBE           PA   15650
1007    1.    17.24   11.    8.    3.    1.   PUNXSUTAWNEY      PA   15767
1008    2.    14.31    6.    9.    1.    1.   SPANGLER          PA   15775
1009    1.    14.31    7.    9.    2.    1.   HOLLSOPPLE        PA   15935
1010    2.    11.08    2.   12.    2.    1.   BUTLER            PA   16001
1011    2.    15.53    9.    7.    1.    1.   MARS              PA   16046
1012    1.    13.23    2.   12.    2.    1.   KITTANNING        PA   16201
1013    3.    15.19    9.    6.    2.    1.   OIL CITY          PA   16301
1014    3.    12.94    5.   14.    2.    1.   OIL CITY          PA   16301
1015    3.    12.12    2.   14.    1.    1.   FAIRVIEW          PA   16415
1016    2.    16.68    8.    3.    3.    1.   BRADFORD          PA   16701
1017    2.    14.89    1.    9.    1.    1.   STATE COLLEGE     PA   16801
1018    2.    17.93    1.    9.    1.    1.   WELLSBORO         PA   16901
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1019  2.           [illegible]  [illegible]  7.           1.  1.  CAMP HILL        PA  17011
1020  [illegible]  [illegible]  2.           10.          2.  1.  MECHANICSBURG    PA  17055
1021  [illegible]  [illegible]  [illegible]  [illegible]  4.  2.  HARRISBURG       PA  17104
1022  [illegible]  [illegible]  7.           [illegible]  2.  1.  HARRISBURG       PA  17109
1023  [illegible]  [illegible]  [illegible]  3.           3.  1.  WAYNESBORO       PA  17268
1024  [illegible]  14.7[illegible]  [illegible]  4.       1.  1.  EAST BERLIN      PA  17316
1025  4.           3.24         3.           14.          2.  1.  MCSHERRYSTOWN    PA  17344
1026  [illegible]  17.7[illegible]  [illegible]  [illegible]  3.  1.  RED LION     PA  17356
1027  [illegible]  [illegible]  [illegible]  12.          2.  1.  PARADISE         PA  17562
1028  [illegible]  [illegible]  2.           14.          2.  1.  DANVILLE         PA  17821
1029  [illegible]  [illegible]  [illegible]  3.           3.  1.  ZION GROVE       PA  17985
1030  [illegible]  [illegible]  [illegible]  9.           2.  1.  BETHLEHEM        PA  18017
1031  [illegible]  [illegible]  [illegible]  [illegible]  [illegible]  2.  PEN ARGYL  PA  18072
1032  2.           [illegible]  7.           12.          1.  1.  LEHIGHTON        PA  18235
1033  [illegible]  [illegible]  [illegible]  [illegible]  2.  1.  MOSCOW           PA  18444
1034  3.           [illegible]  1.           10.          2.  1.  NUANGOLA         PA  18637
1035  4.           [illegible]  3.           14.          2.  1.  AMBLER           PA  19002
1036  1.           [illegible]  1.           9.           2.  1.  FLOURTOWN        PA  19031
1037  4.           [illegible]  [illegible]  10.          2.  1.  ORELAND          PA  19075
1038  [illegible]  [illegible]  [illegible]  [illegible]  2.  1.  PHILA            PA  19111
1039  4.           [illegible]  [illegible]  [illegible]  2.  1.  PHILADELPHIA     PA  19111
1040  [illegible]  [illegible]  3.           [illegible]  2.  1.  PHILADELPHIA     PA  19125
1041  [illegible]  [illegible]  [illegible]  [illegible]  2.  1.  NORRISTOWN       PA  19401
1042  1.           [illegible]  [illegible]  9.           4.  1.  WILM             DE  19802
1043  2.           [illegible]  7.           12.          1.  1.  WILMINGTON       DE  19803
1044  [illegible]  [illegible]  [illegible]  [illegible]  2.  1.  WILMINGTON       DE  19810
1045  3.           [illegible]  [illegible]  14.          1.  1.  WASHINGTON       DC  20011
1046  [illegible]  [illegible]  [illegible]  3.           3.  1.  WASHINGTON       DC  20024
1047  2.           [illegible]  [illegible]  3.           3.  1.  LAUREL           MD  20811
1048  [illegible]  [illegible]  [illegible]  [illegible]  1.  1.  SAVAGE           MD  20863
1049  2.           [illegible]  [illegible]  [illegible]  1.  1.  GLEN BURNIE      MD  21061
1050  6.           [illegible]  [illegible]  15.          2.  1.  PHOENIX          MD  21131
1051  2.           [illegible]  4.           7.           1.  1.  RANDALLSTOWN     MD  21135
1052  2.           14.21        2.           11.          1.  1.  SEVERNA PARK     MD  21146
1053  4.           [illegible]  2.           10.          4.  1.  BALTIMORE        MD  21222
1054  2.           [illegible]  1.           10.          1.  1.  FLINTSTONE       MD  21530
1055  1.           [illegible]  3.           3.           3.  2.  HAGERSTOWN       MD  21740
1056  2.           14.17        1.           10.          1.  1.  HAGERSTOWN       MD  21740
1057  3.           [illegible]  2.           10.          2.  1.  MAUGANSVILLE     MD  21767
1058  1.           [illegible]  1.           9.           2.  1.  FALLS CHURCH     VA  22042
1059  1.           [illegible]  [illegible]  3.           3.  1.  SPRINGFIELD      VA  22153
1060  3.           [illegible]  [illegible]  7.           1.  1.  VIENNA           VA  22180
1061  4.           [illegible]  2.           10.          4.  1.  ARLINGTON        VA  22204
1062  [illegible]  [illegible]  9.           7.           1.  1.  RICHMOND         VA  23225
1063  3.           [illegible]  11.          3.           1.  2.  ROANOKE          VA  24013
1064  4.           14.33        11.          5.           1.  2.  MONTGOMERY       WV  25136
1065  1.           [illegible]  2.           9.           4.  1.  CHARLESTON       WV  25312
1066  3.           [illegible]  2.           10.          2.  1.  WHEELING         WV  26003
1067  5.           [illegible]  3.           15.          2.  1.  ASHEBORO         NC  27203
1068  4.           14.71        9.           [illegible]  2.  1.  ELON COLLEGE     NC  27244
1069  [illegible]  [illegible]  5.           15.          2.  1.  JAMESTOWN        NC  27282
1070  1.           [illegible]  7.           9.           2.  1.  KERNERSVILLE     NC  27284
1071  4.           [illegible]  3.           14.          2.  1.  GREENSBORO       NC  27403
1072  2.           [illegible]  1.           12.          1.  1.  CULPEPPER        VA  27701
1073  4.           [illegible]  3.           14.          2.  1.  GREENVILLE       NC  27834
1074  3.           14.72        3.           [illegible]  1.  1.  HARRISBURG       NC  28075
1075  4.           [illegible]  [illegible]  7.           4.  1.  SHELBY           NC  28150
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1076   3.   [illegible]   4.    7.   1.   1.   FAYETTEVILLE       NC   28301
1077   3.   17.47        11.    5.   1.   1.   FAYETTEVILLE       NC   28302
1078   1.   18.57         5.    3.   3.   2.   FAYETTEVILLE       NC   28303
1079   3.   15.41         9.    7.   1.   1.   HENDERSONVILLE     NC   28739
1080   3.   12.24         3.   14.   1.   1.   SPARTANBURG        SC   29300
1081   1.   23.11        11.    3.   5.   2.   HILTON HEAD I      SC   29928
1082   1.   17.10         5.    5.   2.   1.   CANTON             GA   30114
1083   1.   14.92         7.    7.   2.   1.   GRAYSON            GA   30221
1084   4.   11.89         3.   14.   2.   1.   HAMPTON            GA   30228
1085   2.   15.30         3.    3.   3.   1.   ATLANTA            GA   30310
1086   3.   11.57         2.   14.   1.   1.   EAST POINT         GA   30344
1087   3.   14.24         1.   10.   1.   1.   OGLETHORPE         GA   31068
1088   3.   14.32         2.   10.   2.   1.   LAWTEY             FL   32058
1089   3.   19.05        12.    5.   1.   1.   NEW SMYRNA BCH     FL   32069
1090   2.   12.10         9.    7.   1.   1.   TALLAHASSEE        FL   32303
1091   1.   11.07         7.    9.   2.   1.   PERRY              FL   32347
1092   1.   16.50        11.    8.   1.   2.   PENSACOLA          FL   32504
1093   2.   11.79         1.    9.   1.   1.   MILTON             FL   32570
1094   2.   12.53         2.   10.   2.   1.   HOLLYWOOD          FL   33021
1095   1.   11.33         1.    9.   2.   1.   PEMBROKE PINE      FL   33024
1096   2.   13.19         9.    7.   1.   1.   MIAMI              FL   33147
1097   2.   11.89         6.    4.   1.   1.   W PALM BEACH       FL   33405
1098   3.   13.20         9.    7.   1.   1.   BRANDON            FL   33511
1099   2.   11.20         9.    5.   2.   1.   CLEARWATER         FL   33515
1100   3.   19.50        11.    5.   1.   1.   PALMETTO           FL   33561
1101   1.   16.31         9.    6.   2.   1.   PINELLAS PARK      FL   33565
1102   4.    9.61         3.   14.   2.   1.   TAMPA              FL   33611
1103   [illegible]   22.50   11.   15.   1.   1.   BIRMINGHAM   AL   35209
1104   3.   11.52         5.   14.   2.   1.   BIRMINGHAM         AL   35209
1105   3.   20.26        11.    5.   1.   2.   HUNTSVILLE         AL   35802
1106   1.   11.27         1.    9.   2.   1.   MONTGOMERY         AL   36109
1107   [illegible]   14.43   [illegible]   9.   2.   1.   DOTHAN   AL   36301
1108   1.   14.07         2.    9.   4.   1.   ELBA               AL   36323
1109   2.   11.90         1.    9.   1.   1.   AUBURN             AL   36830
1110   1.   12.33         2.    9.   4.   1.   CMBRLND FRNCE      TN   37051
1111   2.   15.13         1.    5.   4.   1.   NASHVILLE          TN   37215
1112   1.   16.24         2.   12.   4.   1.   FAYETTEVILLE       TN   37334
1113   3.   13.01         2.   14.   1.   1.   CHATTANOOGA        TN   37416
1114   4.   14.80         1.    5.   2.   1.   KNOXVILLE          TN   37920
1115   2.   14.16         6.   12.   1.   1.   ARLINGTON          TN   38002
1116   2.   11.85         3.   14.   1.   1.   DYERSBURG          TN   38024
1117   2.   12.11         7.   12.   1.   1.   MEMPHIS            TN   38111
1118   4.   17.31         9.    7.   2.   1.   MEMPHIS            TN   38118
1119   1.   13.99         9.    8.   2.   1.   PARIS              TN   38242
1120   3.   14.65         2.   11.   1.   1.   SAVANNAH           TN   38372
1121   3.   16.05         2.   10.   2.   1.   CLIFTON            TN   38425
1122   4.   14.38         3.   14.   2.   1.   OXFORD             MS   38655
1123   1.   14.78         6.   10.   4.   2.   WALLS              MS   38680
1124   4.   11.01         2.   10.   4.   1.   CARROLLTON         MS   38917
1125   6.   11.21         3.   15.   2.   1.   JACKSON            MS   39206
1126   1.   13.19         1.    9.   4.   1.   JACKSON            MS   39209
1127   4.   15.00        11.    5.   1.   2.   BILOXI             MS   39530
1128   4.   17.95         9.    5.   2.   1.   WAVELAND           MS   39576
1129   4.   11.74         3.   14.   2.   1.   COLUMBUS           MS   39701
1130   1.   12.42         7.    9.   2.   1.   LOUISVILLE         KY   40201
1131   1.   10.21         8.    2.   3.   2.   LOUISVILLE         KY   40220
1132   3.   15.39         2.   10.   2.   1.   LOUISVILLE         KY   40229
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1133   [illegible]   [illegible]    3.    15.    2.    1.   LEXINGTON            KY   40502
1134   [illegible]   22.01    2.     3.    3.    2.   LEXINGTON            KY   40504
1135   2.     12.33    5.    12.    2.    1.   SCOTTSVILLE          KY   42164
1136   1.     11.11   11.     3.    3.    1.   HOPKINSVILLE         KY   42240
1137   1.     13.11    1.     3.    2.    1.   HENDERSON            KY   42420
1138   2.     12.[illegible]    1.     4.    2.    1.   WORTHINGTON          OH   43085
1139   [illegible]   13.64    2.    11.    1.    1.   AMANDA               OH   43102
1140   3.     14.26    2.    14.    1.    1.   CANAL WINCHESTR      OH   43110
1141   2.     14.[illegible]9    9.     7.    1.    1.   COLUMBUS             OH   43204
1142   7.     13.13    7.    12.    1.    1.   COLUMBUS             OH   43212
1143   3.     14.35    5.    14.    2.    1.   COLUMBUS             OH   43213
1144   3.     15.33    1.    14.    1.    1.   COLUMBUS             OH   43229
1145   2.     12.14    2.    15.    2.    1.   KENTON               OH   43326
1146   2.     13.16    1.     9.    1.    1.   MAUMEE               OH   43537
1147   4.     17.29   11.     5.    1.    2.   TOLEDO               OH   43604
1148   7.     11.04    6.    11.    1.    1.   TOLEDO               OH   43612
1149   3.     12.55    3.    14.    1.    1.   TOLEDO               OH   43612
1150   4.     11.43    2.    10.    4.    1.   TOLEDO               OH   43623
1151   4.     14.24    9.     3.    4.    1.   NEWCOMERSTOWN        OH   43832
1152   [illegible]   10.32    1.    10.    1.    1.   STEUBENVILLE         OH   43952
1153   2.     11.39    7.    12.    1.    1.   AVON                 OH   44011
1154   2.     14.33    2.    12.    2.    1.   N RIDGEVILLE         OH   44039
1155   4.     18.99    1.     5.    2.    1.   MENTOR               OH   44060
1156   4.     16.27    1.     5.    2.    1.   NORTHFIELD           OH   44067
1157   1.     14.17    1.     9.    2.    1.   WELLINGTON           OH   44090
1158   4.     1[illegible].48    1.     4.    2.    1.   EASTLAKE             OH   44094
1159   1.     13.71    8.     2.    3.    1.   CLEVELAND            OH   44113
1160   1.     11.37    4.     4.    2.    1.   UNIVERSITY HT        OH   44118
1161   3.     12.74   11.     5.    1.    2.   BEACHWOOD            OH   44122
1162   2.     12.73    1.    11.    1.    1.   GARFIELD HTS         OH   44125
1163   3.     14.55    1.    10.    1.    1.   BAY VILLAGE          OH   44140
1164   1.     13.37    7.     9.    2.    1.   RICHMOND HTS         OH   44143
1165   3.     15.59    9.     7.    1.    1.   ATWATER              OH   44201
1166   3.     15.75   11.     5.    1.    1.   NORTON               OH   44203
1167   3.     10.01    1.     7.    2.    1.   CLINTON              OH   44216
1168   3.     11.33    3.    14.    2.    1.   CUYAHOGA FALLS       OH   44221
1169   2.     15.25    9.     9.    1.    1.   WARREN               OH   44484
1170   3.     14.02    7.    12.    1.    1.   YOUNGSTOWN           OH   44512
1171   2.      9.32    7.    12.    1.    1.   DOVER                OH   44622
1172   2.     16.15    1.     9.    1.    1.   EAST CANTON          OH   44730
1173   4.      8.52    1.     9.    2.    1.   SANDUSKY             OH   44870
1174   4.     12.36    5.    14.    3.    1.   MANSFIELD            OH   44906
1175   2.     14.30    6.     9.    1.    1.   HAMILTON             OH   45014
1176   3.     15.63    2.    14.    1.    1.   MAINEVILLE           OH   45039
1177   1.     20.79    8.     3.    3.    2.   MILFORD              OH   45150
1178   1.     12.27    7.    12.    2.    1.   CINCINNATI           OH   45215
1179   6.      9.39    5.    15.    2.    1.   CINCINNATI           OH   45216
1180   4.     13.57    1.     9.    2.    1.   CINCINNATI           OH   45226
1181   3.     12.73    5.    14.    2.    1.   BROOKVILLE           OH   45309
1182   3.     17.15    9.     7.    1.    1.   TROY                 OH   45373
1183   1.     15.30    1.     9.    2.    1.   DAYTON               OH   45424
1184   1.     11.15    2.     9.    4.    1.   DAYTON               OH   45430
1185   1.     11.59    1.    12.    2.    1.   DAYTON               OH   45432
1186   1.     17.32    2.    12.    2.    1.   SPRINGFIELD          OH   45501
1187   2.     23.42    5.     3.    3.    2.   LIMA                 OH   45804
1188   3.     13.57    5.    14.    2.    1.   FINDLAY              OH   45840
1189   4.     12.51    2.    10.    4.    1.   ALEXANDRIA           IN   46001
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1190   1.   [illegible]  11.   3.   3.   1.   WHITESTOWN        IN   46075
1191   3.   14.27         5.  15.   2.   1.   COATESVILLE       IN   46121
1192   3.   14.35         3.  14.   1.   1.   GREENWOOD         IN   46162
1193   3.   13.75         1.  10.   1.   1.   INDIANAPOLIS      IN   46220
1194   3.   14.52         3.  14.   1.   1.   INDIANAPOLIS      IN   46224
1195   4.   13.24         1.   9.   2.   1.   SPEEDWAY          IN   46224
1196   2.   15.12         7.   9.   1.   1.   INDIANAPOLIS      IN   46226
1197   4.   11.40         3.  14.   2.   1.   E CHICAGO         IN   46312
1198   4.   12.36         1.   5.   2.   1.   MUNSTER           IN   46321
1199   2.   11.53         5.  12.   4.   2.   HAMMOND           IN   46342
1200   4.   11.82         7.  10.   4.   1.   WANATAH           IN   46390
1201   3.   13.99         5.  14.   2.   1.   NEW CARLISLE      IN   46552
1202   1.   15.19        11.   8.   3.   1.   CHURUBUSCO        IN   46723
1203   1.   10.54         2.   9.   4.   1.   FT WAYNE          IN   46802
1204   3.   11.16         3.  14.   1.   1.   GREENSBURG        IN   47240
1205   1.   14.75         7.  12.   2.   1.   BRYANT            IN   47326
1206   3.   10.11         2.  10.   2.   1.   PORTLAND          IN   47371
1207   4.   12.13         5.  14.   3.   1.   SELMA             IN   47383
1208   1.   16.09         1.   9.   2.   1.   JASONVILLE        IN   47438
1209   4.   13.16         2.  10.   4.   1.   MONROE CITY       IN   47557
1210   3.   12.55         3.  14.   1.   1.   TERRE HAUTE       IN   47804
1211   2.   12.41         2.  11.   1.   1.   BRAZIL            IN   47834
1212   3.   13.01         5.  14.   2.   1.   ALLENTON          MI   48002
1213   2.   14.19         6.   9.   1.   1.   BIRMINGHAM        MI   48009
1214   4.   15.55         9.   5.   1.   1.   FARMINGTON        MI   48024
1215   4.   12.61         3.  14.   2.   1.   FARMINGTON        MI   48024
1216   2.   14.17         6.   9.   1.   1.   W BLOOMFIELD      MI   48033
1217   2.   14.10         9.   7.   1.   1.   W BLOOMFIELD      MI   48033
1218   1.   12.77         2.   9.   4.   1.   LAKE ORION        MI   48035
1219   4.   10.80         2.  14.   4.   1.   MT CLEMENS        MI   48043
1220   2.   10.35         2.  11.   1.   1.   PONTIAC           MI   48053
1221   2.   10.92         2.  14.   3.   1.   ROYAL OAK         MI   48067
1222   5.   11.78         5.  13.   2.   1.   MADISON HTS       MI   48071
1223   2.   12.29         6.   9.   1.   1.   STERLING HTS      MI   48078
1224   4.   13.59         9.   5.   4.   1.   STERLING HGTS     MI   48078
1225   1.   14.29         2.   9.   4.   1.   ST CLAIR SHOR     MI   48082
1226   1.   19.47         8.   2.   3.   1.   WARREN            MI   48092
1227   2.   11.62         9.   7.   1.   1.   WARREN            MI   48092
1228   1.   14.83         1.   9.   2.   1.   WATERFORD         MI   48095
1229   1.   13.98         9.   6.   2.   1.   ANN ARBOR         MI   48103
1230   1.   21.65         8.   3.   3.   1.   ANN ARBOR         MI   48105
1231   4.   18.89         9.   5.   2.   1.   ANN ARBOR         MI   48105
1232   2.   12.96         7.  12.   1.   1.   DEARBORN          MI   48124
1233   4.   13.14         1.  10.   4.   1.   DEARBORN          MI   48126
1234   2.   12.06         2.  11.   1.   1.   DEARBORN HTS      MI   48127
1235   1.   20.29        11.   3.   5.   2.   GROSSE ILE        MI   48138
1236   1.   19.51        11.   8.   1.   2.   LIVONIA           MI   48154
1237   1.   17.49         9.   6.   2.   1.   MONROE            MI   48161
1238   3.   15.70         9.   7.   1.   1.   TAYLOR            MI   48180
1239   2.   12.58         7.  12.   1.   1.   HIGHLAND PARK     MI   48203
1240   1.   12.49         2.   9.   4.   1.   DETROIT           MI   48217
1241   2.   12.05         6.   9.   1.   1.   DETROIT           MI   48221
1242   3.   11.84         5.  14.   2.   1.   DETROIT           MI   48221
1243   4.   20.02         9.   7.   1.   1.   DETROIT           MI   48221
1244   4.   18.61         9.   5.   4.   1.   DETROIT           MI   48224
1245   3.   16.28         1.  10.   1.   1.   DETROIT           MI   48235
1246   1.   15.23         1.   9.   2.   1.   DURAND            MI   48429
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1247	2.	16.63	1.	9.	1.	1.	METAMORA	MI	48455
1248	1.	17.08	6.	9.	2.	1.	FLINT	MI	48504
1249	4.	12.21	3.	14.	2.	1.	FLINT	MI	48504
1250	4.	14.94	1.	10.	4.	1.	SAGINAW	MI	48602
1251	4.	11.29	3.	14.	2.	1.	SAGINAW	MI	48602
1252	3.	13.95	2.	10.	2.	1.	HOLT	MI	48842
1253	1.	23.59	8.	3.	3.	2.	LANSING	MI	48910
1254	2.	13.78	2.	11.	1.	1.	KALAMAZOO	MI	49004
1255	1.	14.66	6.	9.	2.	2.	BATTLE CREEK	MI	49016
1256	3.	15.63	11.	5.	1.	2.	BATTLE CREEK	MI	49017
1257	3.	12.02	3.	14.	1.	1.	BATTLE CREEK	MI	49017
1258	3.	18.24	1.	10.	1.	1.	CENTREVILLE	MI	49032
1259	1.	25.44	11.	3.	5.	2.	PLAINWELL	MI	49080
1260	1.	15.03	2.	9.	4.	1.	JACKSON	MI	49201
1261	3.	16.55	1.	10.	1.	1.	BLISSFIELD	MI	49228
1262	1.	16.42	6.	9.	2.	1.	MUNITH	MI	49259
1263	4.	11.75	2.	10.	4.	1.	GRAND RAPIDS	MI	49505
1264	2.	16.26	1.	6.	2.	1.	GRAND RAPIDS	MI	49506
1265	4.	10.03	2.	10.	4.	1.	GRAND RAPIDS	MI	49507
1266	1.	29.92	8.	2.	3.	1.	LAKE CITY	MI	49651
1267	1.	15.24	2.	9.	4.	1.	ATLANTA	MI	49709
1268	3.	15.13	2.	10.	2.	1.	ROGERS CITY	MI	49779
1269	3.	12.95	2.	10.	2.	1.	MARQUETTE	MI	49855
1270	2.	15.32	2.	11.	1.	1.	ANKENY	IA	50021
1271	2.	15.15	1.	9.	1.	1.	LORIMOR	IA	50149
1272	3.	15.25	3.	14.	1.	1.	W DES MOINES	IA	50265
1273	1.	21.76	11.	3.	5.	2.	DES MOINES	IA	50310
1274	4.	21.55	11.	5.	1.	1.	DES MOINES	IA	50312
1275	1.	14.08	9.	8.	2.	1.	DES MOINES	IA	50322
1276	2.	23.10	8.	3.	3.	1.	BODE	IA	50519
1277	3.	13.43	2.	14.	1.	1.	CLARION	IA	50525
1278	1.	15.58	1.	9.	1.	1.	SAC CITY	IA	50583
1279	1.	17.86	6.	6.	4.	2.	HULL	IA	51239
1280	1.	26.10	8.	3.	3.	2.	OAKLAND	IA	51560
1281	2.	13.85	1.	10.	2.	1.	DUBUQUE	IA	52001
1282	3.	11.50	9.	7.	1.	1.	ANAMOSA	IA	52205
1283	3.	22.72	11.	5.	1.	2.	VINTON	IA	52349
1284	1.	16.04	11.	8.	3.	1.	WELLMAN	IA	52356
1285	1.	10.63	2.	12.	2.	1.	CEDAR RAPIDS	IA	52400
1286	2.	17.26	8.	3.	3.	1.	CEDAR RAPIDS	IA	52402
1287	3.	14.05	9.	7.	1.	1.	CEDAR RAPIDS	IA	52405
1288	4.	13.86	9.	5.	2.	1.	OTTUMWA	IA	52501
1289	2.	20.54	8.	3.	3.	1.	SHEBOYGAN FLS	WI	53085
1290	2.	16.15	1.	9.	1.	1.	WEST BEND	WI	53095
1291	2.	11.21	2.	11.	1.	1.	CUDAHY	WI	53110
1292	2.	16.16	1.	6.	2.	1.	MILWAUKEE	WI	53207
1293	2.	14.58	9.	9.	1.	1.	MILWAUKEE	WI	53209
1294	6.	9.83	5.	15.	2.	1.	MILWAUKEE	WI	53212
1295	1.	15.91	9.	6.	2.	1.	MILWAUKEE	WI	53213
1296	2.	13.55	1.	11.	1.	1.	BAYSIDE	WI	53217
1297	3.	16.40	1.	10.	1.	1.	BROWN DEER	WI	53223
1298	2.	14.09	6.	12.	4.	2.	MILWAUKEE	WI	53227
1299	3.	15.23	9.	7.	1.	1.	RACINE	WI	53403
1300	2.	13.97	6.	10.	4.	2.	MADISON	WI	53713
1301	3.	15.99	11.	5.	1.	1.	PLATTEVILLE	WI	53818
1302	2.	16.52	9.	9.	1.	1.	WOODVILLE	WI	54028
1303	2.	11.85	7.	12.	1.	1.	GREEN BAY	WI	54302

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1304     1.     12.34     1.      9.      2.      1.     GREEN BAY          WI   54303
1305     2.     15.42     2.     11.      1.      1.     GREEN BAY          WI   54303
1306     1.     15.28     1.      9.      4.      1.     WAUSAU             WI   54401
1307     2.     13.35     2.     11.      1.      1.     WAUSAU             WI   54401
1308     1.     14.92     7.      9.      2.      1.     BOYCEVILLE         WI   54725
1309     1.     21.91    11.      3.      3.      1.     BRUCE              WI   54819
1310     3.     18.74     9.      7.      1.      1.     SUPERIOR           WI   54880
1311     2.     14.85     1.      9.      1.      1.     MENASHA            WI   54952
1312     4.     12.72     1.      9.      2.      1.     NO ST PAUL         MN   55109
1313     2.     17.12     9.      7.      1.      1.     WHITE BEAR LK      MN   55110
1314     3.     14.35     4.      9.      1.      1.     WHITE BEAR LK      MN   55110
1315     1.     19.92     8.      3.      3.      1.     MINNEAPOLIS        MN   55417
1316     4.     12.76     9.      9.      4.      1.     MINNEAPOLIS        MN   55418
1317     3.     13.06     1.     10.      1.      1.     ROSEVILLE          MN   55421
1318     3.     20.31    11.      5.      1.      1.     PLYMOUTH           MN   55441
1319     3.     14.94     1.     10.      1.      1.     CONGER             MN   56020
1320     3.     14.41     3.     14.      1.      1.     HENNING            MN   56551
1321     1.     10.13     9.      9.      2.      1.     MINOT              ND   58701
1322     4.     10.15     2.     14.      4.      1.     BOZEMAN            MT   59715
1323     3.     16.14     3.     14.      1.      1.     DES PLAINES        IL   60016
1324     4.     16.95     1.      5.      2.      1.     DES PLAINES        IL   60016
1325     2.     14.42     1.     11.      1.      1.     GLENVIEW           IL   60025
1326     4.     15.17     1.      5.      2.      1.     LAKE BLUFF         IL   60048
1327     4.     11.69     3.     14.      2.      1.     MCHENRY            IL   60050
1328     3.     11.77     5.     14.      2.      1.     NORTH CHICAGO      IL   60064
1329     1.     15.50    11.      8.      1.      1.     WHEELING           IL   60090
1330     3.     14.05     9.      5.      2.      1.     SCHAUMBURG         IL   60172
1331     6.     13.35     3.     15.      2.      1.     EVANSTON           IL   60201
1332     3.     13.75     9.      7.      1.      1.     EVANSTON           IL   60202
1333     1.     15.65     9.      6.      2.      1.     JOLIET             IL   60433
1334     1.     12.04     1.      9.      2.      1.     THORTON            IL   60470
1335     3.     11.75     3.     14.      1.      1.     RICHTON PARK       IL   60471
1336     4.      9.41     2.     14.      4.      1.     S HOLLAND          IL   60473
1337     1.     14.79     9.      6.      2.      1.     WORTH              IL   60482
1338     2.     15.29     9.      6.      2.      1.     BATAVIA            IL   60510
1339     1.     16.08     6.      9.      2.      1.     HINSDALE           IL   60521
1340     2.     16.77     8.      3.      3.      1.     HINSDALE           IL   60521
1341     4.     14.14     1.      9.      2.      1.     OAK BROOK          IL   60521
1342     2.     16.73     8.      3.      3.      1.     CHICAGO            IL   60607
1343     6.     13.42     3.     15.      2.      1.     CHICAGO            IL   60618
1344     4.     10.99     1.      9.      2.      1.     CHICAGO            IL   60621
1345     1.     11.07     1.      9.      2.      1.     CHICAGO            IL   60626
1346     2.     12.11     7.     12.      1.      1.     CHICAGO            IL   60629
1347     2.     11.89     6.     12.      4.      2.     CHICAGO            IL   60634
1348     3.     17.02    11.      5.      1.      1.     CHICAGO            IL   60652
1349     3.     10.99     2.     14.      2.      1.     CHICAGO            IL   60655
1350     3.     18.77     9.      6.      2.      1.     CHICAGO            IL   60659
1351     4.     14.34     1.      5.      2.      1.     KANKAKEE           IL   60901
1352     3.     11.22     5.     14.      2.      1.     ROCHELLE           IL   61068
1353     6.     11.68     5.     15.      2.      1.     GRANDRIDGE         IL   61325
1354     3.     12.64     2.     10.      2.      1.     PERU               IL   61354
1355     1.     17.54     1.      6.      2.      1.     MAQUON             IL   61458
1356     1.     12.10     1.      9.      2.      1.     PEORIA             IL   61601
1357     1.      8.48     2.     13.      4.      1.     PEORIA             IL   61604
1358     4.     12.32     3.     14.      2.      1.     CATLIN             IL   61817
1359     1.     20.13    11.      8.      1.      2.     DANVILLE           IL   61832
1360     1.     18.33     9.      6.      2.      1.     WOOD RIVER         IL   62095
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1361	3.	15.26	9.	7.	1.	1.	SPARTA	IL	62286
1362	3.	19.35	11.	5.	1.	1.	HAVANA	IL	62644
1363	2.	15.35	9.	9.	1.	1.	SPRINGFIELD	IL	62704
1364	1.	14.21	7.	9.	2.	1.	SPRINGFIELD	IL	62801
1365	3.	17.57	11.	5.	1.	2.	MARYLAND HTS	MO	63043
1366	6.	10.79	3.	15.	2.	1.	TOWN ^ COUNTRY	MO	63131
1367	1.	14.01	6.	6.	4.	2.	ST LOUIS	MO	63136
1368	3.	10.00	5.	14.	2.	1.	FERGUSON	MO	63136
1369	3.	9.60	5.	14.	2.	1.	HANNIBAL	MO	63401
1370	1.	20.00	11.	8.	1.	2.	LEES SUMMIT	MO	64063
1371	2.	25.87	9.	3.	3.	2.	KANSAS CITY	MO	64116
1372	4.	19.59	11.	5.	1.	1.	KANSAS CITY	MO	64155
1373	4.	12.22	2.	14.	4.	1.	TARKIO	MO	64491
1374	2.	15.59	9.	6.	2.	1.	JOPLIN	MO	64801
1375	1.	13.09	2.	12.	4.	1.	MARSHALL	MO	65340
1376	3.	13.27	1.	10.	1.	1.	MILLER	MO	65707
1377	6.	12.87	3.	15.	2.	1.	LAWRENCE	KS	66044
1378	4.	12.45	3.	14.	2.	1.	PAOLA	KS	66071
1379	1.	12.15	9.	9.	2.	1.	SHAWNEE	KS	66203
1380	4.	11.50	3.	14.	2.	1.	TOPEKA	KS	66506
1381	3.	13.00	9.	6.	4.	2.	WICHITA	KS	67203
1382	4.	13.36	2.	10.	4.	1.	WICHITA	KS	67206
1383	3.	13.56	2.	10.	2.	1.	WICHITA	KS	67207
1384	4.	12.35	1.	9.	2.	1.	LYONS	KS	67554
1385	1.	21.05	8.	2.	3.	1.	CLATONIA	NE	68328
1386	4.	13.45	1.	10.	2.	2.	CHADRON	NE	69337
1387	4.	24.06	11.	5.	1.	1.	CHADRON	NE	69337
1388	2.	11.51	2.	12.	2.	1.	MARRERO	LA	70072
1389	4.	19.39	11.	5.	1.	1.	CROWLEY	LA	70526
1390	1.	16.54	11.	8.	3.	1.	JENNINGS	LA	70546
1391	4.	12.64	3.	14.	2.	1.	NEW IBERIA	LA	70563
1392	4.	11.85	2.	10.	4.	1.	LAKE CHARLES	LA	70601
1393	2.	14.38	2.	11.	1.	1.	HOMER	LA	71040
1394	4.	17.33	1.	5.	2.	1.	HEFLIN	LA	71100
1395	3.	15.58	11.	5.	1.	1.	SHREVEPORT	LA	71105
1396	2.	11.15	6.	12.	1.	1.	SHREVEPORT	LA	71106
1397	4.	11.04	2.	14.	3.	1.	MANY	LA	71449
1398	1.	15.25	9.	6.	2.	1.	PINE BLUFF	AR	71601
1399	3.	12.73	3.	14.	1.	1.	HOT SPRINGS	AR	71901
1400	2.	11.19	2.	14.	1.	1.	ALEXANDER	AR	72002
1401	4.	12.07	2.	10.	4.	1.	MORRILTON	AR	72110
1402	1.	17.43	2.	12.	2.	1.	FAIRFIELD BAY	AR	72153
1403	4.	11.30	3.	14.	2.	1.	JONESBORO	AR	72401
1404	1.	15.17	1.	9.	2.	1.	ROGERS	AR	72756
1405	3.	13.72	2.	14.	1.	1.	ALMA	AR	72921
1406	3.	14.37	1.	10.	1.	1.	OKLAHOMA CITY	OK	73107
1407	3.	21.18	11.	5.	1.	2.	ALTUS	OK	73521
1408	2.	14.51	9.	9.	1.	1.	HOBART	OK	73651
1409	2.	14.68	1.	10.	2.	1.	TULSA	OK	74104
1410	2.	14.30	9.	7.	1.	1.	TULSA	OK	74145
1411	3.	11.34	3.	14.	1.	1.	MC KINNEY	TX	75069
1412	1.	12.94	2.	9.	4.	1.	MESQUITE	TX	75149
1413	6.	12.37	3.	15.	2.	1.	DALLAS	TX	75214
1414	3.	9.50	5.	14.	2.	1.	DALLAS	TX	75220
1415	3.	14.62	1.	10.	1.	1.	DALLAS	TX	75231
1416	3.	12.72	3.	14.	1.	1.	DALLAS	TX	75231
1417	4.	16.56	11.	5.	1.	2.	DALLAS	TX	75231

1418	3.	14.44	1.	[illegible]	1.	1.	DALLAS	TX	75240
1419	1.	13.73	7.	9.	2.	1.	GILMER	TX	75644
1420	3.	10.43	3.	15.	2.	1.	MARSHALL	TX	75670
1421	3.	15.59	3.	14.	1.	1.	JASPER	TX	75951
1422	3.	11.72	3.	14.	1.	1.	ARLINGTON	TX	76012
1423	4.	12.03	3.	13.	2.	1.	ARLINGTON	TX	76015
1424	1.	11.01	1.	9.	2.	1.	CLEBURNE	TX	76031
1425	4.	10.47	2.	10.	4.	1.	GAINESVILLE	TX	75240
1426	4.	13.97	1.	9.	2.	1.	HOUSTON	TX	77007
1427	1.	13.24	7.	12.	2.	1.	HOUSTON	TX	77018
1428	4.	13.11	11.	5.	1.	1.	HOUSTON	TX	77019
1429	6.	10.57	3.	15.	2.	1.	HOUSTON	TX	77022
1430	2.	10.94	2.	14.	1.	1.	HOUSTON	TX	77024
1431	4.	11.06	9.	9.	4.	1.	HOUSTON	TX	77043
1432	3.	14.41	3.	14.	1.	1.	SPRING	TX	77376
1433	1.	12.86	1.	9.	1.	1.	BRAZORIA	TX	77422
1434	1.	11.27	1.	9.	2.	1.	PASADENA	TX	77502
1435	1.	19.20	6.	3.	3.	1.	FRESNO	TX	77545
1436	2.	11.78	1.	9.	1.	1.	PORT ARTHUR	TX	77640
1437	4.	8.54	2.	14.	3.	1.	SAN ANTONIO	TX	78209
1438	7.	10.68	6.	12.	1.	1.	SAN ANTONIO	TX	78215
1439	4.	15.94	9.	5.	4.	1.	SAN ANTONIO	TX	78227
1440	4.	12.45	1.	10.	2.	1.	SAN ANTONIO	TX	78228
1441	4.	13.57	5.	14.	3.	1.	SAN ANTONIO	TX	78230
1442	6.	9.31	3.	15.	2.	1.	KINGSVILLE	TX	78363
1443	6.	11.10	3.	15.	2.	1.	CORPUS CHRISTI	TX	78410
1444	4.	17.47	11.	5.	1.	2.	BROWNSVILLE	TX	78520
1445	4.	9.62	2.	10.	4.	1.	GONZALES	TX	78629
1446	4.	10.85	2.	10.	4.	1.	LULING	TX	78648
1447	2.	9.63	1.	10.	2.	1.	AUSTIN	TX	78704
1448	1.	15.64	7.	9.	2.	1.	UVALDE	TX	78801
1449	6.	8.01	3.	15.	2.	1.	AMARILLO	TX	79105
1450	4.	10.63	2.	10.	4.	1.	LUBBOCK	TX	79401
1451	2.	14.98	9.	7.	1.	1.	ABILENE	TX	79601
1452	3.	14.41	2.	10.	2.	1.	MIDLAND	TX	79701
1453	1.	20.13	11.	8.	1.	2.	BIG SPRING	TX	79720
1454	3.	9.11	3.	14.	1.	1.	ODESSA	TX	79761
1455	1.	23.26	8.	3.	3.	2.	WESTMINSTER	CO	80030
1456	2.	13.94	7.	14.	1.	1.	LAKEWOOD	CO	80226
1457	4.	14.33	9.	7.	1.	1.	BOULDER	CO	80302
1458	3.	15.39	1.	10.	1.	1.	LAS ANIMAS	CO	81054
1459	3.	15.57	1.	10.	1.	1.	GRAND JUNCTION	CO	81501
1460	4.	13.88	2.	10.	3.	1.	PALISADE	CO	81526
1461	4.	11.07	2.	10.	4.	1.	WORLAND	WY	82401
1462	2.	11.01	2.	14.	4.	1.	SHERIDAN	WY	82801
1463	1.	19.91	11.	8.	1.	2.	MOSCOW	ID	83843
1464	4.	19.50	11.	5.	1.	2.	BOUNTIFUL	UT	84010
1465	1.	8.37	7.	5.	2.	1.	SALT LAKE CTY	UT	84115
1466	4.	12.70	3.	14.	2.	1.	SCOTTSDALE	AR	85252
1467	3.	11.75	3.	14.	1.	1.	SUN CITY	AZ	85351
1468	3.	11.23	1.	10.	2.	1.	ALBUQUERQUE	NM	87111
1469	4.	23.44	11.	5.	1.	2.	LAS VEGAS	NM	87701
1470	3.	12.46	3.	14.	1.	1.	CARLSBAD	NM	88220
1471	6.	13.21	5.	15.	2.	1.	HAWTHORNE	NV	89415
1472	6.	10.00	3.	15.	2.	1.	RENO	NV	89502
1473	6.	7.64	3.	15.	2.	1.	LOS ANGELES	CA	90043
1474	1.	11.72	1.	10.	2.	1.	LOS ANGELES	CA	90066

1475	4.	19.43	11.	5.	1.	1.	LOS ANGELES	CA	90066
1476	3.	15.70	9.	10.	1.	1.	LOS ANGELES	CA	90068
1477	4.	10.59	2.	14.	2.	1.	COMPTON	CA	90220
1478	4.	12.91	4.	10.	1.	1.	HAWTHORNE	CA	90250
1479	2.	11.00	6.	10.	1.	1.	REDONDO BEACH	CA	90277
1480	1.	8.58	1.	10.	2.	1.	REDONDO BEACH	CA	90278
1481	3.	13.22	5.	10.	1.	1.	SAN PEDRO	CA	90732
1482	1.	18.10	9.	6.	4.	1.	MONTROSE	CA	91020
1483	2.	13.40	1.	10.	2.	1.	NORTHRIDGE	CA	91324
1484	1.	22.54	5.	3.	3.	2.	CANYON CNTRY	CA	91351
1485	2.	16.15	9.	6.	4.	1.	SHERMAN OAKS	CA	91423
1486	3.	19.97	11.	5.	1.	1.	CHINO	CA	91710
1487	6.	9.92	3.	15.	2.	1.	ALHAMBRA	CA	91803
1488	1.	16.17	11.	3.	5.	1.	CARLSBAD	CA	92008
1489	3.	20.56	11.	5.	1.	1.	SAN DIEGO	CT	92126
1490	1.	18.57	11.	3.	5.	1.	SAN DIEGO	CA	92134
1491	5.	13.81	3.	15.	2.	1.	PALM SPRINGS	CA	92262
1492	2.	16.72	8.	3.	3.	1.	COLTON	CA	92324
1493	4.	12.57	2.	10.	4.	1.	FONTANA	CA	92335
1494	1.	19.01	11.	3.	5.	1.	OAKVIEW	CA	93022
1495	1.	12.54	2.	12.	4.	1.	OXNARD	CA	93030
1496	2.	22.41	8.	3.	3.	2.	OXNARD	CA	93030
1497	4.	18.86	11.	5.	1.	1.	PORTERVILLE	CA	93257
1498	2.	13.49	7.	12.	1.	1.	TULARE	CA	93274
1499	2.	21.55	8.	3.	3.	2.	BAKERSFIELD	CA	93304
1500	3.	12.08	9.	10.	1.	1.	RIDGECREST	CA	93555
1501	4.	14.88	3.	14.	2.	1.	ORANGE COVE	CA	93646
1502	6.	9.66	5.	15.	2.	1.	FRESNO	CA	93727
1503	2.	12.37	6.	12.	1.	1.	SALINAS	CA	93901
1504	1.	12.14	1.	10.	2.	1.	ATHERTON	CA	94025
1505	6.	[illegible]	5.	15.	2.	1.	SUNNYVALE	CA	94086
1506	2.	13.34	7.	12.	1.	1.	MARTINEZ	CA	94553
1507	4.	9.10	3.	14.	2.	1.	BERKELEY	CA	94702
1508	1.	11.93	9.	6.	4.	1.	BERKELEY	CA	94709
1509	6.	11.23	5.	15.	2.	1.	LOS GATOS	CA	95030
1510	4.	12.53	9.	7.	2.	1.	SANTA CLARA	CA	95051
1511	6.	11.44	5.	15.	2.	1.	SANTA CLARA	CA	95051
1512	6.	11.55	3.	15.	2.	1.	SAN JOSE	CA	95112
1513	4.	17.30	11.	5.	1.	1.	SAN JOSE	CA	95124
1514	1.	20.71	8.	3.	3.	2.	SAN JOSE	CA	95127
1515	4.	10.43	4.	5.	2.	1.	SAN JOSE	CA	95130
1516	3.	13.99	4.	7.	4.	1.	TWAIN HARTE	CA	95383
1517	1.	12.86	9.	10.	4.	1.	CITRUS HTS	CA	95610
1518	5.	10.08	5.	15.	2.	1.	SACRAMENTO	CA	95825
1519	4.	13.46	1.	10.	2.	1.	GLADSTONE	OR	97027
1520	2.	15.00	1.	9.	1.	1.	CORNELIUS	OR	97113
1521	3.	16.43	4.	7.	1.	1.	OAKRIDGE	OR	97453
1522	2.	15.76	9.	9.	1.	1.	KLAMATH FALLS	OR	97601
1523	2.	11.79	2.	11.	1.	1.	EDMONDS	WA	98020
1524	1.	21.47	8.	3.	3.	1.	MOUNTLAKE TER	WA	98043
1525	3.	17.81	11.	5.	1.	2.	SEATTLE	WA	98122
1526	2.	15.00	8.	3.	3.	1.	MOUNT VERNON	WA	98273
1527	2.	12.61	1.	9.	1.	1.	TACOMA	WA	98499
1528	1.	13.51	1.	9.	2.	1.	OLYMPIA	WA	98503
1529	2.	15.47	4.	7.	1.	1.	LONGVIEW	WA	98632
1530	3.	19.97	11.	5.	1.	2.	E WENATCHEE	WA	98801
1531	1.	11.11	7.	12.	2.	1.	SPOKANE	WA	99205
1532	3.	11.15	2.	14.	1.	1.	KENNEWICK	WA	99336

Table A-2. GM Data Base Listing (Seasonal, Geographical Data)

NUMBER	WT.	SEASON	AMPD	POPULATION	SUBURB	TERRAIN	ELEVATION	TEMP	REL HUM	PRECIP	SNOW-ICE	MODEL
1	4000.	W	43.59	7419	N	B3	510	-.9	72	153	333	2202
2	4500.	W	27.62	15396	N	B3	603	-.9	72	153	333	2204
3	5500.	W	70.00	180341	N	B3	470	-.9	72	153	333	2506
4	5000.	W	42.10	35149	S	B2	100	3.2	68	100	91	2209
5	4500.	W	33.32	24754	S	B2	50	3.2	68	100	91	2204
6	5250.	W	33.10	9821	S	B2	107	3.2	68	100	91	2609
7	5500.	W	27.73	9821	S	B2	107	3.2	68	100	91	2302
8	5500.	W	432.00	13995	S	B2	30	3.2	68	100	91	2207
9	5500.	W	58.14	616320	N	B2	20	3.2	68	100	91	2506
10	3000.	S	30.14	88514	S	B2	150	19.7	76	84	0	2601
11	4000.	W	26.74	50468	S	B2	100	3.2	68	100	91	2202
12	4500.	W	20.65	89500	N	B3	175	-2.9	91	102	465	2204
13	4000.	W	7.77	21800	N	B4	45	-1.0	73	112	209	2202
14	4000.	W	43.78	403	N	C5	695	-1.9	77	53	427	2406
15	5500.	W	31.04	36300	N	B4	110	-1.9	77	53	427	2506
16	4500.	W	59.50	3137	N	B4	110	-1.9	77	53	427	2204
17	5000.	W	20.42	49500	N	C4	289	-.7	72	115	216	2209
18	5000.	W	33.50	49500	N	C4	289	-.7	72	115	216	2209
19	3500.	S	32.00	49500	N	C4	289	20.2	71	97	0	2499
20	4000.	W	15.33	44500	N	C4	272	-.7	72	115	216	2605
21	5000.	W	33.93	16733	S	C4	191	-.7	72	115	216	2209
22	5500.	W	13.84	57533	S	C4	50	-.7	72	115	216	2506
23	4000.	W	27.84	68031	S	C4	120	-.7	72	115	216	2202
24	4500.	W	23.59	4964	N	C4	17	-.7	72	115	216	2204
25	4000.	W	49.54	55000	N	C4	144	-.7	72	115	216	2202
26	5500.	W	33.94	55000	N	C4	144	-.7	72	115	216	2207
27	4500.	S	21.25	55000	N	C4	144	20.2	71	97	0	2204
28	3500.	S	134.00	55000	N	C4	144	20.2	71	97	0	2201
29	5500.	W	99.80	20000	N	C4	257	-.7	72	115	216	2506
30	5500.	W	23.76	23900	S	A2	136	3.8	68	102	30	2506
31	3500.	W	32.60	5000	S	A2	282	3.8	68	102	30	2499
32	3000.	S	20.71	5000	S	A2	282	22.0	70	163	0	2601
33	5250.	W	21.30	29800	S	A2	25	3.8	68	102	30	2609
34	4500.	W	26.61	13228	S	A2	12	3.8	68	102	30	2407
35	4500.	W	27.67	270000	N	A2	11	3.8	68	102	30	2204
36	5500.	W	20.46	270000	N	A2	11	3.8	68	102	30	2506
37	4500.	W	10.45	3760	S	B3	59	3.8	68	102	30	2204
38	4500.	W	29.24	10100	S	B3	83	3.8	68	102	30	2204
39	5500.	W	35.76	17400	S	A2	21	4.1	58	132	28	2302
40	4000.	W	33.58	21755	S	B3	40	3.8	68	102	30	2202
41	5250.	W	49.59	1500	S	A2	70	4.1	68	103	20	2505
42	5250.	W	21.29	63500	S	A2	35	4.1	58	103	20	2609
43	5250.	W	33.00	63500	S	A2	35	4.1	58	103	20	2505
44	5500.	W	27.08	2500	S	A2	70	4.1	58	103	20	2506
45	4500.	W	112.20	23500	S	A2	40	4.1	68	103	20	2204
46	4500.	W	17.31	5000	S	A2	19	4.1	68	103	20	2204
47	5500.	W	24.77	9500	S	A2	64	4.1	58	103	20	2506
48	4500.	W	22.67	900	S	A2	19	4.1	65	103	20	2204
49	4000.	W	29.50	4000	S	A2	23	4.1	68	103	20	2405

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50	4500.	W	35.67	4590	N	A1	6	3.9	62	121	1	2204
51	5500.	W	27.95	2151	S	A2	211	4.1	68	132	28	2506
52	5250.	W	24.35	107000	N	A2	50	4.1	68	132	28	2609
53	5500.	W	35.42	107000	N	A2	50	4.1	68	132	23	2303
54	4000.	W	23.00	19000	N	A1	67	3.9	62	121	1	2405
55	4500.	W	30.35	700	N	A2	173	4.1	68	103	20	2412
56	5000.	W	41.87	31600	S	A2	90	3.8	68	102	30	2209
57	5500.	W	42.36	40000	S	A2	42	3.8	68	102	30	2207
58	4500.	W	24.86	8080000	N	A1	30	4.2	65	160	5	2204
59	5500.	W	45.18	8080000	N	A1	30	4.2	65	160	5	2506
60	3500.	W	15.08	9080000	N	A1	30	4.2	65	150	5	2501
61	5250.	W	18.00	300000	S	A1	30	4.2	65	160	5	2609
62	4000.	W	47.58	18345	S	A2	155	4.2	65	160	5	2202
63	3000.	S	35.32	18345	S	A2	155	20.7	76	185	0	2402
64	5250.	W	30.08	201573	S	A2	16	4.2	65	150	5	2505
65	4000.	W	41.75	4640	S	A2	160	4.2	65	160	5	2202
66	5500.	W	20.75	24000	N	B3	500	4.2	65	160	5	2302
67	5250.	W	130.00	3763	N	B3	679	4.2	65	160	5	2505
68	4000.	W	62.22	10900	S	A1	84	4.2	65	160	5	2605
69	4500.	W	9.13	2500000	N	A1	66	4.2	65	160	5	2204
70	5250.	W	251.25	1700	S	B2	50	4.2	65	160	5	2609
71	4000.	W	13.93	1700	S	B2	50	4.2	65	160	5	2405
72	5500.	W	51.40	1700	S	B2	240	4.2	65	160	5	2509
73	4500.	W	14.32	15000	S	A1	60	4.2	65	160	5	2204
74	5500.	W	17.23	39500	S	A1	20	4.2	65	150	5	2508
75	5500.	W	10.47	2800	S	B2	119	4.2	65	160	5	2508
76	5500.	S	4.00	2800	S	B2	119	20.7	76	185	0	2303
77	4500.	W	15.56	19400	S	B2	15	4.2	65	160	5	2204
78	4500.	W	19.00	29300	S	B2	80	4.2	65	150	5	2204
79	5500.	W	48.09	23500	S	B2	80	4.2	65	160	5	2207
80	5250.	W	70.45	17500	S	B2	220	4.2	65	160	5	2505
81	5250.	W	30.50	9600	S	B2	80	4.2	65	160	5	2409
82	5250.	W	13.14	53000	S	B2	149	4.2	65	160	5	2505
83	4500.	W	15.88	53000	S	B2	149	4.2	65	160	5	2204
84	5500.	W	18.00	3900	S	B4	220	-1.7	80	65	318	2506
85	5250.	W	49.54	1317	N	D5	640	-1.7	80	65	318	2609
86	5250.	W	32.00	127000	N	B4	150	-1.7	80	65	318	2409
87	5250.	W	21.05	127000	N	B4	150	-1.7	80	65	318	2609
88	5250.	W	66.90	16910	N	B3	188	-1.7	80	65	318	2609
89	5250.	W	39.53	5559	N	B3	200	-1.7	80	65	319	2505
90	5500.	W	21.70	5015	N	B3	400	4.2	65	160	5	2207
91	5250.	W	22.93	34800	N	B4	709	-.9	91	88	665	2409
92	5500.	W	83.62	500	N	B2	398	-.9	91	88	665	2506
93	5500.	W	451.50	3522	N	B3	1133	-.9	91	88	665	2508
94	5250.	W	21.14	215000	N	B2	406	-.9	91	88	665	2505
95	5250.	W	10.15	8732	N	B2	460	-.9	91	88	665	2206
96	5250.	W	39.33	11500	N	B2	443	-.9	91	88	665	2505
97	5250.	W	35.13	2986	N	B2	495	-.9	91	88	665	2206
98	5500.	W	29.56	500	N	B2	381	-2.7	83	73	673	2508
99	4500.	W	27.25	6843	N	B2	1015	-.9	91	88	665	2407
100	4000.	W	35.38	2810	N	B2	690	-.2	85	80	599	2202
101	5250.	W	51.30	100	N	B2	1450	-.2	85	80	599	2409
102	5250.	W	13.26	905	N	B2	928	-.2	85	80	599	2609
103	4500.	W	21.40	9500	S	B2	820	-.2	85	80	599	2204
104	5250.	W	30.40	4174	N	B3	1341	-.2	85	80	599	2609
105	4500.	W	9.65	22300	S	B2	600	-.2	85	80	599	2412
106	4000.	W	5.54	505000	N	B2	600	-.2	85	80	599	2502

107	5250.	W	62.44	505000	N	B2	600	-.2	85	80	599	2206
108	5250.	W	21.52	52000	S	B2	580	-.2	85	80	599	2505
109	5250.	W	19.35	52000	S	B2	580	-.2	85	80	599	2206
110	5500.	S	32.14	52000	S	B2	530	20.0	75	93	0	2207
111	5250.	W	33.64	113844	S	B2	650	-.2	85	80	599	2505
112	4500.	S	39.57	113844	S	B2	650	20.0	75	93	0	2412
113	5500.	W	24.46	1800	S	B2	280	-.3	83	73	673	2207
114	4500.	W	13.46	1382	N	B2	620	-.3	83	73	673	2506
115	5250.	W	30.73	125	N	B2	1400	-.2	85	80	599	2609
116	5250.	W	60.33	1590	S	32	420	-.3	83	73	673	2206
117	5500.	W	70.17	300000	N	B2	515	-.3	83	73	673	2506
118	5250.	W	44.60	1404	S	D4	860	.3	76	102	538	2409
119	4000.	W	14.19	27400	S	D4	1200	.3	76	102	538	2405
120	5250.	W	24.38	11300	S	D4	773	.3	76	102	538	2609
121	5500.	W	30.36	2297	S	D4	860	.3	76	102	538	2303
122	5250.	W	19.43	25500	S	D4	1180	.3	76	102	538	2609
123	4000.	W	14.56	560000	N	D4	760	.3	76	102	538	2405
124	5250.	W	12.54	550000	N	D4	760	.3	76	102	538	2505
125	4000.	W	13.65	550000	N	D4	760	.3	76	102	538	2406
126	4500.	W	11.32	550000	N	D4	760	.3	76	102	538	2407
127	5250.	W	5.36	550000	N	D4	760	.3	76	102	538	2609
128	5250.	W	24.35	560000	N	D4	760	.3	76	102	538	2609
129	5250.	W	13.39	550000	N	D4	760	.3	76	102	538	2505
130	5250.	W	21.79	550000	N	D4	760	.3	76	102	538	2609
131	4000.	W	33.07	550000	N	D4	760	.3	76	102	538	2406
132	5250.	W	27.00	550000	N	D4	760	.3	76	102	538	2609
133	5000.	W	45.11	1500	S	D4	984	.3	76	102	538	2209
134	5250.	W	248.50	3593	N	C5	1100	1.9	75	117	13	2409
135	4000.	W	15.65	7200	N	C5	1100	1.9	76	117	13	2605
136	5250.	W	24.09	7200	N	C5	1100	1.9	76	117	13	2505
137	5000.	W	11.24	14200	N	C4	1310	.3	76	102	538	2209
138	4000.	W	10.31	41500	N	B3	860	-.8	79	77	518	2605
139	5000.	W	163.60	41500	N	B3	860	-.8	79	77	518	2209
140	4000.	W	22.82	1971	N	C4	1340	1.2	71	114	117	2405
141	5250.	W	20.67	135000	N	B2	744	-.6	85	91	511	2505
142	5500.	W	13.97	67000	N	C5	1206	1.9	76	117	13	2506
143	4000.	W	32.86	2496	N	C5	2167	1.9	76	117	13	2405
144	3500.	W	21.00	1390	N	B3	540	-.6	85	91	511	2499
145	4500.	W	30.93	313	N	B2	475	1.9	76	117	13	2204
146	5250.	W	23.39	9803	N	C5	400	1.9	76	117	13	2409
147	5250.	S	35.31	9803	N	C5	400	21.5	77	165	0	2505
148	5250.	W	14.45	75000	N	B2	360	1.9	76	117	13	2409
149	4500.	S	14.34	75000	N	B2	360	21.5	77	165	0	2412
150	5250.	W	35.38	1759	N	C5	560	1.9	76	117	13	2409
151	4500.	W	15.16	32500	N	B3	400	1.9	76	117	13	2204
152	5250.	W	14.72	32500	N	B3	400	1.9	76	117	13	2505
153	5500.	W	12.57	32500	N	B3	400	1.9	75	117	13	2302
154	5500.	W	35.50	65000	N	B3	380	1.9	75	117	13	2506
155	4000.	W	30.75	14000	N	C5	440	1.9	76	117	13	2605
156	5250.	W	44.22	7972	N	C5	400	1.2	71	114	117	2409
157	4500.	W	25.37	8209	N	B3	540	1.8	75	115	91	2204
158	5500.	W	45.14	3593	S	C4	1240	1.3	74	86	132	2506
159	4000.	W	33.10	12900	N	C5	569	1.3	74	86	132	2406
160	4000.	W	21.50	19500	S	C5	544	1.3	74	86	132	2405
161	4000.	W	40.87	19500	S	C5	544	1.3	74	86	132	2502
162	5250.	W	95.25	11800	S	B3	100	4.1	68	103	20	2609
163	4500.	W	11.52	35000	S	B3	250	4.1	68	103	20	2204

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164  4000.  W   21.18    28000  S  B3   220   4.1  68  103   20  2406
165  4500.  S   37.88    28000  S  B3   220  22.3  72  192    0  2608
166  5250.  W   10.85     2323  S  B3   400   4.1  68  103   20  2505
167  4500.  S   45.08     2323  S  B3   400  22.3  72  192    0  2204
168  4000.  W   16.24  2030000  N  B3    45   4.1  68  103   20  2405
169  4000.  S   15.07  2030000  N  B3    45  22.3  72  192    0  2405
170  4500.  S   15.10  2030000  N  B3    45  22.3  72  192    0  2204
171  4000.  W   13.90  2030000  N  B3    45   4.1  68  103   20  2407
172  5500.  W   33.83  2030000  N  B3    45   4.1  68  103   20  2506
173  5250.  W    4.81  2030000  N  B3    45   4.1  68  103   20  2409
174  4000.  W   13.20  2030000  N  B3    45   4.1  68  103   20  2405
175  3500.  W   35.73    10000  S  B3   360   4.1  68  103   20  2499
176  4000.  W   14.48    13800  N  A1   124   3.8  68  106    1  2405
177  4500.  W   35.73    10500  S  B2   350   6.2  64  113    1  2204
178  5250.  W   42.64   810000  N  B2    50   6.2  64  113    1  2505
179  5500.  W  121.83      350  S  B2   200   6.2  64  113    1  2506
180  5250.  W   28.20    14000  S  B2   290   6.2  64  113    1  2505
181  4000.  W   21.53     8000  S  B2   250   6.2  64  113    1  2202
182  4000.  W   37.17     2000  S  B2   265   6.2  64  113    1  2605
183  4000.  S   21.70     2000  S  B2   265  24.7  64   55    0  2604
184  5250.  W   12.18      100  S  B2   160   6.2  64  113    1  2609
185  5500.  W   28.13      500  N  B2     9   6.2  64  113    1  2506
186  4000.  W   28.40     7000  S  B2   508   6.2  64  113    1  2605
187  5250.  W  394.00    14500  S  B2    59   6.2  64  113    1  2409
188  5500.  W   15.34    10200  S  B2   100   6.2  64  113    1  2302
189  5500.  W   88.75    37000  S  B2   451   6.2  64  113    1  2506
190  4500.  W   26.59     4000  S  B2   496   4.6  68  145   10  2204
191  4500.  S   38.67     4000  S  B2   496  22.3  73   97    0  2204
192  5500.  W   42.74   925000  N  B2    32   4.6  68  145   10  2302
193  4500.  W   15.54   925000  N  B2    32   4.6  68  145   10  2204
194  5250.  W   55.70   925000  N  B2    32   4.6  68  145   10  2609
195  5250.  S   41.27   925000  N  B2    32  22.8  73   97    0  2206
196  5500.  W   62.88   925000  N  B2    32   4.5  68  145   10  2506
197  5250.  W   13.48   925000  N  B2    32   4.5  68  145   10  2609
198  4500.  W   23.48   925000  N  B2    32   4.5  68  145   10  2407
199  5250.  W   19.85    27500  N  B2    57   4.6  68  145   10  2505
200  4000.  S   35.12    27500  N  B2    57  22.8  73   97    0  2406
201  5250.  W   34.75     1195  S  B2   541   4.6  68  145   10  2505
202  5250.  W   15.15      355  S  B2    27   4.5  68  145   10  2505
203  5500.  W   45.52    21000  S  B2   350   6.2  64  113    1  2506
204  4500.  W  112.67     5700  S  B2   321   6.2  64  113    1  2503
205  3500.  W   45.42   115000  S  B2    50   6.2  64  113    1  2499
206  4000.  W   25.79   115000  S  B2    50   6.2  64  113    1  2202
207  5250.  W   25.19    10000  N  B2    84   7.8  75   97    1  2505
208  5250.  W   94.11   224000  N  B2   150   5.4  72  107    1  2505
209  4000.  W   49.11   172100  S  A1    18   7.8  75   97    1  2406
210  5250.  W   58.64   110000  N  A1    12   7.9  75   97    1  2609
211  4000.  S   38.17    37000  N  B2    87  23.1  72  102    0  2605
212  5500.  W   47.94   100500  N  B4   948   3.9  64   80  168  2506
213  5250.  W   18.73     5347  S  B4  1012   3.9  64   80  168  2505
214  4500.  W   17.70      851  N  D5  1860   1.3  80   88  419  2606
215  4500.  W   37.25      130  N  D5  2565   1.3  80   89  419  2204
216  5250.  W   50.45    85000  N  D4   620   2.7  75   81  211  2206
217  4000.  W   32.42    85000  N  D4   620   2.7  75   81  211  2405
218  5500.  W   41.64      800  N  D4   560   3.7  75   73  150  2303
219  4500.  W   12.90    81500  N  D4   570   3.7  75   73  150  2407
220  5500.  W   11.21    17500  N  C5  2416   1.3  80   88  419  2508
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221	5500.	W	21.83	25000	N	04	1011	2.9	75	83	257	2508
222	4000.	W	44.00	139000	N	B2	884	5.4	69	107	1	2405
223	5250.	W	10.98	131711	N	B2	841	5.4	69	107	1	2505
224	4500.	W	11.45	31000	N	B2	121	6.2	78	102	1	2204
225	3500.	S	26.27	31000	N	B2	121	23.2	72	42	5	2201
226	5250.	W	23.55	2852	N	B2	226	6.2	78	102	1	2609
227	4500.	W	22.00	105722	N	B2	363	6.2	78	102	1	2503
228	4500.	W	14.87	33500	N	B2	121	6.2	78	102	1	2503
229	5500.	W	23.86	33500	N	B2	121	6.2	78	102	1	2506
230	4500.	W	31.18	23500	N	B2	764	5.4	69	107	1	2503
231	4500.	W	13.35	230000	N	B2	721	5.6	75	97	1	2606
232	4500.	W	54.85	230000	N	B2	721	5.6	75	97	1	2503
233	5500.	W	41.82	230000	N	B2	721	5.6	75	97	1	2302
234	4500.	W	139.67	2333	N	A1	110	9.7	77	94	0	2606
235	5250.	W	23.87	25200	N	A1	44	6.2	78	102	1	2609
236	5250.	W	113.60	16000	N	A1	15	9.7	77	94	0	2609
237	4500.	W	41.33	207	N	A1	110	6.2	78	102	1	2606
238	5000.	W	47.85	2281	N	B2	1100	5.6	75	97	1	2209
239	4500.	W	36.63	20800	N	B2	925	5.6	75	97	1	2608
240	4000.	S	58.43	20800	N	B2	925	23.9	66	47	0	2202
241	4500.	W	53.46	1564	N	05	2036	4.6	76	60	76	2503
242	5000.	W	22.92	62000	N	C5	2216	4.6	76	60	76	2209
243	4000.	W	30.52	795000	N	A1	9	10.6	73	76	0	2405
244	5250.	W	30.83	12600	N	A1	10	10.5	73	76	0	2409
245	4500.	W	34.00	677	N	B2	150	8.9	80	117	0	2606
246	4500.	W	44.92	67000	N	B2	966	6.3	73	64	0	2606
247	4500.	W	57.00	67000	N	B2	966	6.3	73	64	0	2608
248	4500.	S	37.36	67000	N	B2	966	23.6	72	137	0	2204
249	5500.	W	32.22	9200	N	B2	1091	6.3	73	64	0	2506
250	4500.	W	107.80	9300	N	B2	1016	6.3	73	64	0	2204
251	4000.	W	37.44	3315	N	B2	667	6.3	73	64	0	2405
252	4500.	W	23.04	3000	N	B2	476	7.7	75	103	0	2503
253	5250.	W	127.80	22200	S	B2	1048	6.8	75	135	1	2609
254	4500.	W	164.50	1561	N	B3	1315	6.8	75	135	1	2204
255	5250.	W	106.38	4462	N	B3	1209	6.8	75	135	1	2505
256	5000.	W	34.65	131500	N	B3	605	6.5	71	141	1	2209
257	4500.	W	91.40	431	N	B3	1340	6.5	71	141	1	2606
258	5250.	W	113.66	2224	N	C2	855	6.8	75	135	1	2505
259	4500.	W	30.62	300	S	B2	780	6.8	75	135	1	2407
260	4500.	W	40.82	535000	N	B2	1057	6.8	75	135	1	2608
261	4500.	W	40.94	26000	S	B2	1057	6.8	75	135	1	2503
262	4500.	S	30.64	26000	S	B2	1057	24.1	73	140	0	2606
263	5250.	W	18.63	3219	N	B2	254	9.8	71	94	1	2409
264	5250.	W	34.47	8356	N	A2	230	11.7	76	47	0	2505
265	4500.	W	429.00	3469	N	A2	210	7.7	75	103	1	2407
266	5000.	W	57.36	17500	N	B3	1217	6.8	75	135	1	2209
267	4500.	W	31.06	1519	N	B3	1487	6.8	75	135	1	2204
268	4500.	W	39.00	950	N	B2	347	7.7	75	103	1	2608
269	4500.	W	28.37	141000	N	A2	41	11.7	76	47	1	2503
270	4000.	W	15.25	141000	N	A2	41	11.7	76	47	1	2502
271	4500.	W	25.31	20800	N	A1	135	12.8	81	44	0	2608
272	4000.	W	28.35	22600	N	A1	8	12.8	81	44	0	2604
273	4500.	W	62.33	5071	N	A2	180	11.3	82	97	0	2606
274	5500.	W	147.83	64000	N	B2	208	9.8	74	131	1	2506
275	4500.	W	29.14	125000	N	B2	249	9.8	74	131	1	2608
276	4500.	W	127.75	125000	N	B2	249	9.8	74	131	1	2608
277	4500.	W	19.74	138000	N	A1	19	12.8	81	44	1	2608

278	3000.	W	36.15	198000	N	A1	19	12.8	81	44	1	2601
279	4500.	S	37.50	198000	N	A1	19	27.2	76	132	0	2503
280	4000.	W	73.56	198000	N	A1	19	12.8	81	44	1	2202
281	4500.	W	21.35	198000	N	A1	19	12.8	81	44	1	2608
282	5250.	W	61.75	9800	N	B2	137	11.3	82	97	0	2505
283	4500.	W	15.45	34500	N	A1	29	13.6	76	63	0	2608
284	4500.	W	14.12	60500	N	A1	11	13.6	76	63	0	2606
285	4500.	W	14.21	7467	N	A1	236	13.6	76	63	0	2608
286	4000.	W	13.82	15500	N	A1	23	13.6	76	63	0	2405
287	5500.	W	20.41	55000	N	A1	185	12.8	81	44	0	2506
288	4500.	W	25.68	1373	N	A1	50	16.1	73	41	0	2608
289	4000.	W	52.85	450	N	A1	128	16.1	73	41	0	2604
290	4500.	W	27.33	4391	S	A1	98	16.1	73	41	0	2606
291	4500.	W	18.82	11641	N	A1	77	16.1	73	41	0	2503
292	5500.	W	19.18	3570	N	A1	89	16.1	73	41	0	2302
293	4000.	W	16.46	22000	N	A1	94	16.1	73	41	0	2502
294	4500.	W	38.75	93500	N	A1	109	16.1	73	41	0	2608
295	5000.	W	23.28	18500	N	A1	25	16.1	73	41	0	2209
296	4500.	W	59.13	4500	N	A1	12	16.1	73	41	0	2606
297	5500.	W	41.35	67000	N	A1	15	20.6	73	30	0	2506
298	5250.	W	22.94	5200	S	A1	13	20.6	73	30	0	2409
299	4000.	W	33.68	5014	S	A1	15	20.6	73	30	0	2604
300	4000.	W	66.43	35500	S	A1	10	20.6	73	30	0	2502
301	4500.	W	21.43	58000	S	A1	5	20.6	73	30	0	2503
302	4500.	W	46.88	325000	N	A1	10	20.6	73	30	0	2503
303	5500.	W	30.92	325000	N	A1	10	20.6	73	30	0	2302
304	5500.	W	15.43	170	S	A1	6	20.6	73	30	0	2207
305	4500.	W	33.67	2000	S	A1	10	20.6	73	30	0	2606
306	4000.	W	27.65	114000	N	A1	10	20.6	73	30	0	2502
307	4500.	W	30.71	114000	N	A1	10	20.5	73	30	0	2503
308	4000.	S	15.92	114000	N	A1	10	27.5	78	162	0	2405
309	4500.	W	19.88	11000	S	A1	7	20.6	73	30	0	2503
310	4500.	W	32.50	59000	N	A1	19	19.3	76	65	0	2608
311	4500.	W	9.57	59000	N	A1	19	19.3	76	65	0	2503
312	4000.	S	30.57	59000	N	A1	19	26.4	80	182	0	2604
313	5500.	W	27.76	14000	S	A1	17	20.6	73	65	0	2207
314	4000.	W	30.27	15300	S	A1	20	19.3	76	65	0	2604
315	4500.	W	15.83	30000	N	A1	24	19.3	76	65	0	2606
316	4500.	W	14.63	7200	S	A1	15	19.3	76	65	0	2606
317	5500.	S	27.76	7200	S	A1	15	26.4	80	182	0	2302
318	3000.	W	49.42	4791	N	A1	13	19.3	76	65	0	2601
319	4500.	W	12.71	3301	N	A1	209	16.1	73	41	0	2606
320	4000.	W	14.96	42500	S	A1	24	16.5	71	71	0	2605
321	4000.	S	12.51	42500	S	A1	24	28.1	74	222	0	2604
322	4500.	W	22.44	10000	S	A1	57	16.6	71	71	0	2204
323	5250.	S	17.39	10000	S	A1	57	28.1	74	222	0	2409
324	4500.	W	22.90	4300	N	A1	11	16.5	71	71	0	2503
325	5250.	W	21.00	15800	N	A1	131	16.6	71	71	0	2505
326	5500.	W	14.12	39000	N	A1	24	16.5	71	71	0	2207
327	5250.	S	17.46	7113	N	A1	10	28.1	74	222	0	2609
328	4500.	W	33.76	305000	N	A1	57	16.5	71	71	0	2503
329	4500.	W	14.82	305000	N	A1	57	16.6	71	71	0	2606
330	4500.	W	15.59	7347	S	A1	56	16.5	71	71	0	2606
331	4500.	W	15.04	7347	S	A1	56	16.5	71	71	0	2503
332	4000.	W	17.68	200000	N	A1	44	16.5	71	71	0	2202
333	5250.	W	11.71	200000	N	A1	44	16.6	71	71	0	2505
334	5500.	W	41.07	44500	N	A1	219	16.5	71	71	0	2506

392	4500.	■	29.56	361706	■	82	455	3.9	80	72	30	2502
393	4500.	■	33.35	361706	■	82	455	3.9	80	72	30	2406
394	4500.	■	23.35	361706	■	82	455	3.9	80	72	30	2412
395	4500.	■	17.37	174323	■	82	983	3.2	82	94	71	2405
396	3500.	■	22.32	174323	■	82	983	23.1	68	57	0	2601
397	4500.	■	33.43	6356	■	82	723	3.2	82	94	71	2405
398	5250.	■	45.13	29245	■	82	545	16.0	76	164	0	2609
399	4500.	■	16.26	29245	■	82	545	25.2	73	139	0	2502
400	5250.	■	30.20	29245	■	82	545	25.2	73	137	0	2505
401	4500.	■	30.00	500	■	83	1017	3.8	54	80	158	2606
402	4500.	■	32.26	2961	■	83	830	1.1	80	68	188	2405
403	5250.	■	45.23	540025	■	A2	780	1.1	80	68	188	2206
404	5500.	■	42.57	540025	■	A2	780	1.1	80	68	188	2302
405	3500.	■	33.25	540025	■	A2	780	1.1	80	68	188	2499
406	5500.	■	11.62	540025	■	A2	780	1.1	80	68	188	2508
407	5500.	■	70.11	7008	■	A1	765	-1.7	83	87	507	2207
408	3500.	■	31.94	383062	■	A1	587	-1.7	83	87	507	2499
409	5500.	■	11.86	33045	■	83	705	1.1	83	58	188	2303
410	5250.	■	35.86	110	■	83	586	1.1	80	68	188	2505
411	5500.	■	15.54	13767	■	83	775	1.1	80	68	188	2302
412	4500.	■	15.93	1095	■	82	715	-.2	80	68	188	2415
413	4500.	■	15.57	70173	■	82	680	-.2	80	123	612	2407
414	4500.	■	20.35	70173	■	82	680	-.2	80	123	612	2405
415	5250.	■	59.86	70173	■	82	680	-.2	82	123	612	2206
416	4500.	■	32.08	70173	■	82	680	-.2	82	123	612	2407
417	5500.	■	61.38	70173	■	82	680	-.2	82	123	612	2207
418	5250.	■	18.13	22139	■	82	1097	-.2	82	123	612	2206
419	5500.	■	33.53	22139	■	82	1097	-.2	82	123	612	2207
420	4500.	■	15.43	22139	■	82	1097	21.2	76	104	0	2502
421	3500.	■	57.29	12700	■	82	1104	-.2	82	123	612	2499
422	4000.	■	12.75	12700	■	82	1104	-.2	82	123	612	2209
423	4500.	■	23.12	15669	■	82	726	-.3	82	123	612	2202
424	5000.	■	42.64	26183	■	83	1071	-.3	82	123	612	2508
425	4000.	■	29.47	275425	■	83	1027	-.3	85	110	747	2406
426	5250.	■	57.75	275425	■	83	1027	-.3	85	110	747	2409
427	5250.	■	6.27	2625	■	82	[illegible]	20.3	76	70	0	2505
428	4000.	■	39.16	1752	■	82	1130	-.3	85	110	747	2406
429	5250.	■	13.05	1450	■	82	1060	-.3	85	110	747	2206
430	[illegible]	■	18.96	13118	■	82	792	-.3	85	110	747	2209
431	[illegible]	■	18.94	[illegible]	■	A2	1102	-.3	82	112	747	2605
432	[illegible]	■	31.27	48767	■	A2	[illegible]	.5	81	73	224	2205
433	[illegible]	■	[illegible]	48767	■	83	[illegible]	22.5	73	57	0	2303
434	[illegible]	■	42.56	500	■	83	[illegible]	.5	84	73	224	2407
435	[illegible]	■	22.71	[illegible]	■	83	[illegible]	.5	84	73	224	2508
436	[illegible]	■	27.65	1993	■	83	[illegible]	.5	81	73	224	2209
437	[illegible]	■	43.81	1993	■	83	[illegible]	.5	84	73	224	2209
438	[illegible]	■	22.76	[illegible]	■	83	[illegible]	.5	84	73	224	2209
439	[illegible]	■	52.36	[illegible]	■	83	[illegible]	.5	84	73	224	2303
440	[illegible]	■	33.52	[illegible]	■	83	[illegible]	.5	81	73	224	2508
441	[illegible]	■	[illegible]	10768	■	83	715	1.1	80	69	188	2605
442	[illegible]	■	[illegible]	31961	■	82	780	1.1	80	69	188	2509
443	[illegible]	■	[illegible]	27533	■	82	[illegible]	3.7	79	73	158	2509
444	[illegible]	■	[illegible]	337736	■	A2	[illegible]	-1.0	90	57	427	2405
445	[illegible]	■	[illegible]	337736	■	A2	[illegible]	-1.0	90	67	427	2205
446	[illegible]	■	[illegible]	337736	■	A2	[illegible]	-1.0	90	57	427	2412
447	[illegible]	■	[illegible]	337736	■	A2	[illegible]	-1.0	90	57	427	2405
448	[illegible]	■	[illegible]	[illegible]	■	A2	[illegible]	-1.0	90	57	427	2409

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449   4000.   W     8.20      7324   N      B3       895    .6      81    73    224    2405
450   4000.   W     9.20     70787   N      A2       880    .5      88    71    147    2202
451   5500.   S    41.19     70787   N      A2       980  21.9      78   146      0    2508
452   5000.   S    39.76     14956   N      A2       850  21.9      78   146      0    2209
453   5500.   W    41.94      1796   N      A2       850    .5      88    71    147    2303
454   4500.   W    71.00       870   N      C3       775    .5      88    71    147    2407
455   4500.   W    12.56    746992   N      A2       710    .5      88    71    147    2407
456   4500.   W    23.79    746992   N      A2       710    .5      88    71    147    2407
457   4000.   S    33.53    746992   N      A2       710  21.9      78   146      0    2604
458   5500.   W    26.84    746992   N      A2       710    .5      88    71    147    2207
459   5250.   W    23.93    746992   N      A2       710    .5      88    71    147    2206
460   4000.   W    14.12    746992   N      A2       710    .5      88    71    147    2202
461   4000.   W    44.15    746992   N      A2       710    .5      88    71    147    2605
462   5250.   W   211.33      7589   N      A1       695    .5      83    60    414    2206
463   4000.   W    24.29     10931   N      A1       700   -.4      83    60    414    2202
464   5500.   W    46.00     20020   N      A1       805   -.4      83    60    414    2207
465   4000.   W    27.44    175415   N      A2       590   -.4      83    60    414    2202
466   5500.   W    27.72     43152   N      B2       755    .5      82    76    505    2302
467   5250.   W    17.18     17871   N      B2       795    .5      82    76    505    2206
468   5500.   W    23.28     35517   N      A1       725    .5      82    76    505    2508
469   4000.   W    43.79    125580   N      B2       710    .5      82    76    505    2502
470   4000.   W    20.83      7388   N      A2       860  -1.3      84    65    310    2405
471   5250.   W    28.64      8445   N      A2       800  -1.3      84    65    310    2206
472   4000.   W    24.96    178021   N      A2       790  -1.3      84    65    310    2605
473   5250.   W    13.05      1284   N      A2       795    .5      88    71    147    2206
474   3500.   W    22.79     19255   N      A2       595  -1.3      84    65    310    2499
475   5500.   W    60.44     39607   N      A2       805  -1.3      84    65    310    2302
476   4500.   S    56.33     39607   N      A2       805  20.9      78   112      0    2606
477   5000.   W    32.13     26457   N      A2       630    .5      88    71    147    2209
478   5250.   W    14.19      3995   N      B3      1105    .5      88    71    147    2206
479   5250.   W    75.22     43262   N      B2       750    .5      88    71    147    2609
480   4500.   S   224.50     43262   N      B2       750  21.9      78   146      0    2503
481   5500.   W    80.50      4092   N      C3       687   3.9      80    72     30    2207
482   5500.   W    15.38     13842   N      B2       740    .5      88    71    147    2508
483   4000.   W    34.00     45920   S      A1       615  -1.9      82   102    886    2406
484   5250.   S    40.91     45920   S      A1       615  20.6      71    61      0    2505
485   5250.   W    48.00     85279   S      A1       930  -1.9      82   102    886    2206
486   5500.   W    29.10     35794   N      A1       600  -1.9      82   102    886    2302
487   4500.   W    24.50      7054   S      A1       745  -1.9      82   102    886    2407
488   3000.   S    27.88      7054   S      A1       745  20.6      71    61      0    2601
489   3500.   W    96.00     21879   S      A1       750  -1.9      82   102    886    2501
490   5250.   W    48.36     86238   S      A1       600  -1.9      82   102    886    2206
491   4000.   W    35.07     69285   S      A1       600  -1.9      82   102    886    2605
492   4000.   W    23.21     61365   N      A2       500  -1.6      78    60    203    2202
493   3500.   W    29.14     39419   S      A1       600  -1.9      82   102    886    2499
494   4500.   S    11.89     39419   S      A1       500  20.6      71    61      0    2608
495   5250.   S    43.50     39419   S      A1       500  20.6      71    61      0    2206
496   3500.   W    46.20      9100   S      A1       625  -1.9      82   102    886    2501
497   4000.   S    58.46      9100   S      A1       625  20.6      71    61      0    2605
498   5500.   W    40.37    100035   N      A2       880  -1.9      82   102    886    2207
499   5250.   W    36.79    104200   S      A1       605  -1.9      82   102    886    2206
500   4000.   W     9.81    110109   S      A1       600  -1.9      82   102    886    2202
501   5250.   W    38.70    110109   S      A1       600  -1.9      82   102    886    2206
502   3500.   S    18.78    110109   S      A1       600  20.6      71    61      0    2499
503   4000.   W    37.29      2763   N      A2       900  -1.9      82   102    886    2605
504   5500.   W     8.00     29238   N      A2       715  -1.9      82   102    886    2508
505   5250.   W    13.15   1600000   N      A1       600  -1.9      82   102    886    2409
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506	4000.	W	14.50	1600000	N	A1	600	-1.9	82	102	886	2605
507	4500.	W	10.49	21878	S	A1	575	-1.9	82	102	886	2407
508	4000.	S	21.22	21878	S	A1	575	20.6	71	61	0	2202
509	5500.	S	52.93	21878	S	A1	575	20.6	71	51	0	2207
510	4 00.	W	18.38	36762	S	A1	600	-1.9	82	102	886	2605
511	5500.	W	9.82	36762	S	A1	600	-1.9	82	102	886	2303
512	5250.	W	32.18	36762	S	A1	600	-1.9	82	102	886	2409
513	3500.	S	44.75	36762	S	A1	600	20.6	71	61	0	2499
514	4500.	S	26.74	36762	S	A1	600	20.6	71	61	0	2608
515	4500.	S	19.41	36762	S	A1	600	20.6	71	61	0	2608
516	4500.	S	42.86	36762	S	A1	600	20.6	71	61	0	2508
517	4500.	S	46.73	36762	S	A1	600	20.6	71	61	0	2608
518	4000.	S	28.06	36762	S	A1	600	20.6	71	61	0	2502
519	4000.	S	86.25	8284	N	B2	905	19.6	75	119	0	2604
520	5250.	W	19.91	7190	N	A2	715	-1.5	78	60	203	2206
521	5250.	W	25.71	5132	N	A2	840	-1.6	78	60	203	2206
522	4000.	W	14.98	193317	N	A1	715	-1.6	78	60	203	2202
523	4500.	W	28.25	91849	N	A1	595	-1.6	78	60	203	2412
524	4000.	W	8.34	91849	N	A1	595	-1.6	78	60	203	2405
525	4000.	W	43.83	400	N	A1	595	-1.6	78	60	203	2605
526	4000.	W	36.86	3200	N	A1	600	-1.6	78	60	203	2202
527	5250.	W	17.83	1050	N	A2	630	-1.6	78	60	203	2206
528	5500.	W	36.68	120	N	A2	700	-1.6	78	60	203	2508
529	4000.	W	13.34	2749	N	A2	745	-1.6	78	60	203	2405
530	5500.	W	220.00	5468	N	B2	885	-1.5	84	61	518	2207
531	4000.	W	13.77	141403	N	B2	830	-1.5	84	61	518	2406
532	5500.	W	26.89	85555	N	B2	755	-1.5	84	61	518	2207
533	5500.	W	36.05	9155	N	A2	900	.5	82	76	505	2302
534	5000.	W	23.00	3160	N	B2	740	.5	82	76	505	2209
535	4000.	S	57.00	3160	N	B2	740	21.3	76	139	0	2406
536	5500.	W	24.20	9295	N	A2	920	.5	82	76	505	2302
537	4000.	W	37.67	1112	N	B2	992	-1.5	84	61	518	2406
538	4000.	W	43.57	2149	N	B2	640	-2.0	84	46	419	2605
539	4500.	W	15.76	17304	N	B2	630	-2.0	84	46	419	2412
540	5250.	W	16.82	197645	N	B2	610	-2.0	84	46	419	2206
541	5250.	S	34.75	197645	N	B2	610	19.8	78	152	0	2206
542	5250.	W	314.50	197645	N	B2	610	-2.0	84	46	419	2206
543	5250.	S	18.14	197645	N	B2	610	19.8	78	152	0	2206
544	5500.	W	20.14	197645	N	B2	610	-2.0	84	46	419	2207
545	5250.	W	42.24	287	N	B2	1229	-4.2	84	33	135	2409
546	3000.	W	36.59	8852	N	B2	970	-2.1	79	46	231	2402
547	3000.	W	13.46	26200	N	B2	938	-2.1	79	46	231	2402
548	4000.	W	44.00	201404	N	B2	803	-2.1	79	46	231	2605
549	4000.	W	76.50	201404	N	B2	803	-2.1	79	46	231	2604
550	4000.	S	13.88	201404	N	B2	803	22.4	71	152	0	2405
551	4000.	W	22.00	31263	N	A2	1030	-4.2	84	33	135	2405
552	4500.	W	61.75	1225	S	A2	1140	-2.1	79	46	231	2407
553	3000.	W	41.47	33154	N	B2	900	-4.2	84	33	135	2601
554	5500.	W	28.92	3014	S	A2	1450	-4.7	75	3	28	2508
555	5500.	W	18.71	60349	N	B2	986	-1.7	77	21	206	2508
556	4000.	W	25.77	327	N	C3	997	-3.6	79	37	295	2502
557	5250.	W	53.64	134	N	C3	891	-3.5	79	37	295	2409
558	3000.	W	41.70	110642	N	B2	730	-4.2	84	33	135	2601
559	3000.	S	9.27	110642	N	B2	730	21.7	70	102	0	2601
560	4500.	W	24.05	735	N	C3	530	-3.6	79	37	295	2407
561	5500.	W	131.33	3647	N	C3	719	-3.6	79	37	295	2508
562	4000.	W	20.12	7597	N	C3	780	-3.6	79	37	295	2202

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563  3000.  W   23.19   10006  N  C3   660  -3.0  82   35  257  2601
564  5250.  S   28.90   10006  N  C3   660  20.5  74   73    0  2609
565  3000.  W   34.84     150  N  A2   660  -1.6  76  101  231  2402
566  5250.  W   11.56   80300  N  A2   610  -1.6  76  101  231  2206
567  4000.  W   19.17  717000  N  A2   610  -1.6  76  101  231  2502
568  4500.  S   37.86  717000  N  A2   510  18.7  80   53    0  2606
569  3500.  W   21.29   71640  S  A2   610  -1.6  76  101  231  2499
570  4000.  S   49.82   71640  S  A2   610  18.7  80   53    0  2605
571  5250.  W   23.95     518  N  C3  1020  -2.9  85   46  391  2206
572  4000.  W   33.41  173000  N  B2   860  -2.9  85   46  391  2202
573  5250.  W   30.15    6488  N  B2   820  -4.2  80   42  264  2206
574  5500.  W   71.56   92000  N  A2   590  -4.2  80   42  264  2508
575  5250.  W   24.50     250  N  A2   800  -4.2  80   42  264  2206
576  5250.  W   45.00  291000  S  B2   874  -4.2  81    9  155  2609
577  4000.  W   34.13   20000  S  B2   800  -4.2  81    9  155  2406
578  4000.  W   15.04  434400  N  B2   840  -4.2  81    9  155  2405
579  3000.  W   37.53  434400  N  B2   840  -4.2  81    9  155  2402
580  4000.  W   24.76  434400  N  B2   840  -4.2  81    9  155  2202
581  5500.  W   50.71  434400  N  B2   840  -4.2  81    9  155  2508
582  3500.  S   83.86  434400  N  B2   840  20.4  69  203    0  2501
583  4000.  W   21.00  100000  N  B2   620  -6.9  85   29  485  2202
584  4500.  W    8.71   53800  N  B2  1006  -5.4  88   14  211  2412
585  4000.  W   45.11   53800  N  B2  1006  -5.4  88   14  211  2202
586  4000.  W   99.00    1820  N  B2  1476  -4.7  75    3   28  2604
587  5250.  W   41.86     400  N  B2  1680  -4.7  75    3   28  2409
588  3000.  W   10.93   55000  N  A1   900  -6.2  83    8  130  2601
589  5500.  W   56.00     943  N  B3  2161  -8.1  83   13  175  2207
590  4500.  W   11.49   65000  N  B4  3124  -1.2  51    8   89  2412
591  3000.  W    9.63   23000  N  C6  4090  -2.4  61    7   69  2402
592  5500.  W   43.56   70000  N  B2   700   -.4  83   60  414  2508
593  5250.  W   19.66   70000  N  B2   700   -.4  83   60  414  2206
594  5500.  W   45.14   55000  N  A2   540   -.4  83   60  414  2207
595  5500.  S   77.88   56000  N  A2   540  22.3  71  118    0  2506
596  4500.  S   46.33   55000  N  A2   640  22.3  71  118    0  2204
597  5500.  W   54.75   56000  N  A2   640   -.4  83   60  414  2508
598  5250.  W   23.00   32000  N  A2   680   -.4  83   60  414  2205
599  5500.  W   18.84    2500  N  A2   600   -.4  83   60  414  2303
600  4000.  W    9.24   42000  N  A2   660   -.4  83   60  414  2502
601  5250.  W   60.09   56000  N  A2   625   -.4  83   60  414  2206
602  5000.  W   42.53   66000  N  A2   625   -.4  83   60  414  2209
603  5250.  S   85.33   66000  N  A2   525  22.3  71  118    0  2409
604  5500.  W   45.00   65000  N  A2   595   -.4  83   60  414  2508
605  4500.  S   48.67   65000  N  A2   595  22.3  71  118    0  2204
606  4000.  W   15.18   13000  N  A2   650   -.4  83   60  414  2202
607  5500.  W   33.70    5000  N  A2   805   -.4  83   60  414  2508
608  5500.  W  160.50   20000  N  A2   600   -.4  83   60  414  2207
609  5500.  W   33.50   60000  N  A2   750   -.4  83   60  414  2302
610  5500.  W   21.63   50000  N  A2   680   -.4  83   60  414  2207
611  5500.  S   31.22   50000  N  A2   680  22.3  71  118    0  2207
612  5500.  W   34.82   12000  S  A2   625   -.4  83   60  414  2207
613  5500.  W   30.00   13000  N  A2   765   -.4  93   60  414  2508
614  5250.  W   21.51   38000  N  A2   745   -.4  83   60  414  2409
615  5500.  S   13.56   38000  N  A2   745  22.3  71  118    0  2506
616  5000.  W   26.74    4000  N  A2   730   -.4  83   60  414  2209
617  4000.  S   24.32    4000  N  A2   730  22.3  71  118    0  2604
618  4000.  W    9.24   50000  S  A2   600   -.4  83   60  414  2202
619  4000.  W   14.20   40000  N  A2   610   -.4  83   60  414  2502
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620	5250.	W	13.17	40000	N	A2	610	-.4	83	60	414	2206
621	5500.	W	27.50	10000	N	A2	625	-.4	83	60	414	2207
622	5250.	W	33.68	24000	N	A2	625	-.4	83	60	414	2409
623	5500.	S	17.78	24000	N	A2	625	22.3	71	118	0	2207
624	5250.	W	30.43	3500	N	A2	530	-.4	83	60	414	2409
625	5250.	W	21.44	3500	N	A2	530	-.4	83	60	414	2206
626	5500.	W	10.07	55000	S	A2	620	-.4	83	60	414	2207
627	4000.	W	25.29	3300	N	A2	520	-.4	83	60	414	2202
628	5250.	W	36.85	30000	N	A2	620	-.4	83	60	414	2206
629	4000.	W	33.94	40000	N	A2	636	-.4	83	60	414	2605
630	5500.	W	29.79	33000	N	A2	720	-.4	83	60	414	2207
631	5500.	W	29.93	38000	N	A2	720	-.4	83	60	414	2207
632	4000.	S	41.08	33000	N	A2	720	22.3	71	118	0	2406
633	4500.	S	53.75	33000	N	A2	720	22.3	71	118	0	2503
634	5500.	W	48.44	17000	N	A2	645	-.4	83	60	414	2207
635	5500.	W	43.92	17000	N	A2	645	-.4	83	60	414	2207
636	3500.	S	14.44	17000	N	A2	645	22.3	71	118	0	2501
637	5250.	W	283.00	29000	N	A2	715	-.4	83	60	414	2206
638	4000.	S	39.33	29000	N	A2	715	22.3	71	118	0	2405
639	5500.	W	15.79	3000000	N	A2	595	-.4	83	60	414	2207
640	5250.	W	18.22	3000000	N	A2	595	-.4	83	60	414	2409
641	3000.	S	27.35	3000000	N	A2	595	22.3	71	118	0	2601
642	5250.	W	13.57	3000000	N	A2	595	-.4	83	60	414	2409
643	5500.	W	21.95	3000000	N	A2	595	-.4	83	60	414	2207
644	3000.	W	30.10	3000000	N	A2	595	-.4	83	60	414	2402
645	5500.	W	43.92	3000000	N	A2	595	-.4	83	60	414	2207
646	4500.	S	17.05	3000000	N	A2	595	22.3	71	118	0	2407
647	5500.	W	27.08	3000000	N	A2	595	-.4	83	60	414	2207
648	5250.	W	32.21	3000000	N	A2	595	-.4	83	60	414	2206
649	4500.	S	43.01	3000000	N	A2	595	22.3	71	118	0	2608
650	5250.	W	23.91	3000000	N	A2	595	-.4	83	60	414	2205
651	5250.	W	31.32	3000000	N	A2	595	-.4	83	60	414	2206
652	4000.	S	32.33	3000000	N	A2	595	22.3	71	118	0	2605
653	5250.	W	42.40	3000000	N	A2	595	-.4	83	60	414	2206
654	5250.	W	53.40	3000000	N	A2	595	-.4	83	60	414	2409
655	5250.	W	13.85	3000000	N	A2	595	-.4	83	60	414	2205
656	5500.	W	24.38	3000000	N	A2	595	-.4	83	60	414	2303
657	4000.	W	38.31	3000000	N	A2	595	-.4	83	60	414	2405
658	5250.	W	11.05	3000000	N	A2	595	-.4	83	60	414	2206
659	4000.	W	21.52	3000000	N	A2	595	-.4	83	60	414	2502
660	5500.	W	57.17	480	N	B2	750	-2.9	85	45	391	2207
661	5250.	W	67.56	140000	N	B2	715	-2.9	85	46	391	2206
662	4000.	W	25.29	12000	N	B2	850	-2.9	85	46	391	2502
663	5250.	W	11.88	45000	N	B2	570	-1.2	85	49	157	2206
664	4000.	W	21.46	4000	N	B2	555	-1.2	85	49	157	2605
665	5500.	W	60.30	4000	N	B2	555	-1.2	85	49	157	2508
666	4000.	W	75.25	33000	N	B2	773	-1.2	85	49	157	2202
667	4500.	W	40.78	14000	N	B2	855	-1.2	85	49	157	2412
668	3000.	W	17.08	1000	N	B2	730	-1.2	85	49	157	2601
669	5250.	W	16.95	12000	N	B2	715	-1.2	85	49	157	2206
670	4000.	W	21.42	9000	N	B2	765	-1.2	85	49	157	2502
671	5250.	W	15.59	121000	N	B2	470	-1.2	85	49	157	2205
672	5250.	S	25.27	121000	N	B2	470	22.3	72	99	0	2409
673	5250.	W	235.57	121000	N	B2	470	-1.2	85	49	157	2206
674	5250.	W	25.00	42000	N	A2	780	-1.2	85	49	157	2206
675	4000.	W	31.15	935	N	A2	750	-1.2	85	49	157	2405
676	5250.	W	11.52	3000	N	A2	565	-1.2	85	49	157	2409

677	5500.	W	742.00	9000	N	B2	726	.5	88	71	147	2303
678	4500.	W	46.50	38000	N	B2	430	1.1	87	43	38	2412
679	4500.	W	39.00	7000	N	B2	690	1.1	87	43	38	2407
680	4000.	W	5.44	55000	S	B2	420	1.1	87	43	38	2604
681	4000.	S	53.08	55000	S	B2	420	23.8	72	96	0	2605
682	3000.	W	32.79	503	N	B2	300	2.7	84	77	76	2402
683	3000.	W	33.57	5000	N	B2	531	1.1	87	43	38	2601
684	3000.	S	33.53	5000	N	B2	531	23.8	72	96	0	2601
685	4000.	W	15.27	63000	N	B2	550	1.1	87	43	38	2502
686	3000.	W	19.53	25000	S	B2	581	1.1	87	43	38	2601
687	4000.	W	27.14	536000	N	B2	470	1.1	87	43	38	2604
688	4000.	W	41.27	35000	N	B2	531	1.1	87	43	38	2502
689	4500.	W	45.31	500000	N	C2	800	.1	77	39	30	2606
690	4500.	W	44.58	500000	N	C2	800	.1	77	39	30	2412
691	5500.	W	30.08	500000	N	C2	800	.1	77	39	30	2303
692	5250.	W	35.38	243	S	C2	880	.1	77	39	30	2409
693	4000.	W	35.90	168213	N	C2	744	.1	77	39	30	2502
694	5500.	W	22.55	29000	S	C2	1050	.1	77	39	30	2303
695	4000.	W	47.09	12000	N	C2	1050	.1	77	39	30	2202
696	4000.	W	32.79	2500	N	B2	990	.4	80	30	36	2202
697	4000.	W	21.93	126000	N	B2	951	.4	80	30	35	2502
698	3000.	W	20.10	10341	N	B2	943	1.7	74	56	56	2402
699	4500.	W	12.79	3356	N	B2	904	1.7	74	56	56	2412
700	4000.	W	20.21	3080	N	B2	865	1.7	74	56	56	2405
701	3000.	W	21.09	23000	N	B2	1150	.4	80	30	36	2402
702	5250.	W	36.64	1553	N	A2	1220	1.7	74	56	56	2409
703	4000.	W	19.57	270000	N	A2	1305	1.7	74	56	56	2406
704	4000.	S	33.56	270000	N	A2	1305	23.1	72	175	0	2502
705	5500.	W	79.90	38000	N	B2	1220	1.7	74	56	56	2508
706	4000.	W	31.23	161	N	B2	2010	.9	61	9	71	2405
707	4500.	W	55.78	189	N	B2	2200	.9	61	9	71	2407
708	4500.	W	82.86	269	N	A2	3368	.9	61	9	71	2606
709	4000.	W	15.97	370000	N	B2	1040	-1.7	77	21	206	2202
710	5500.	W	17.28	150000	N	B2	1176	-2.9	76	18	211	2508
711	5000.	S	79.63	150000	N	B2	1176	21.5	71	78	0	2209
712	4000.	W	15.60	17000	N	B2	1449	-1.7	77	21	206	2502
713	5250.	W	59.25	3264	N	B2	237	-4.3	76	11	114	2409
714	5500.	W	28.22	160000	S	A1	5	12.9	83	124	2	2207
715	4000.	W	31.88	560000	N	A1	5	12.9	83	124	2	2604
716	4500.	W	9.48	560000	N	A1	5	12.9	83	124	2	2606
717	5250.	W	42.61	3551	N	A1	40	12.5	83	197	0	2409
718	4000.	W	17.44	15000	N	A1	30	12.5	83	197	0	2202
719	4000.	W	14.97	180000	N	A1	57	12.3	77	94	0	2202
720	4000.	W	21.27	180000	N	A1	57	12.3	77	94	0	2604
721	5500.	W	55.46	6500	N	A2	250	8.5	77	59	0	2207
722	4000.	S	34.64	482	N	A2	210	25.7	77	88	0	2605
723	5500.	W	37.65	1600	N	B2	325	6.9	72	76	1	2302
724	3500.	W	45.33	9000	N	B2	245	6.9	72	76	1	2499
725	3000.	W	40.75	120	N	B2	650	6.9	72	76	1	2402
726	5000.	W	25.73	24000	N	B3	290	6.9	72	76	1	2209
727	4500.	S	29.89	150000	N	B2	330	25.9	70	40	0	2606
728	3000.	W	45.21	250	N	B3	350	4.5	76	59	1	2402
729	5500.	W	393.00	60000	N	B3	450	4.5	76	59	1	2508
730	4500.	W	23.94	9000	N	B2	980	4.2	70	37	51	2605
731	3500.	W	27.89	50000	S	B2	1250	4.2	70	37	51	2499
732	5250.	W	27.88	360000	N	B2	1207	4.2	70	37	51	2409
733	5250.	W	130.80	3400	N	B2	870	6.2	71	22	0	2409

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734   4000.   W    17.16       50   N   B2    850    6.2   71    22    0   2405
735   4500.   W    62.76      368   N   B2   1600    6.2   71    22    0   2412
736   5500.   W    38.75     1033   N   B2   1760    4.2   70    37   51   2207
737   3000.   W     8.16    45000   N   A2   1246    4.2   70    37   51   2601
738   4000.   W    22.89    45000   N   A2   1246    4.2   70    37   51   2202
739   3000.   W    33.81    28000   N   C3    694    4.3   74    73    1   2601
740   4500.   W    23.84     3500   N   B2    740    4.3   74    73    1   2412
741   3000.   W    13.21   330000   N   B2    744    4.3   74    73    1   2601
742   5500.   W    40.44   330000   N   B2    744    4.3   74    73    1   2508
743   5250.   W    24.45     2173   N   B2   1150    4.3   74    73    1   2409
744   5250.   W    63.91      683   N   B2   1000    4.2   70    37   51   2409
745   5000.   W    24.00     8000   N   B2    863    4.2   70    37   51   2209
746   5500.   W    21.17     1680   N   B3    600    4.6   76    59    1   2303
747   4000.   W    48.08    95000   S   B2    470    8.4   70    49    1   2502
748   5500.   W    47.32     2283   N   B2    505    8.4   70    49    1   2508
749   4500.   W    46.67     7000   N   B2    500    8.4   70    49    1   2412
750   4500.   W    12.29   850000   N   B2    512    8.4   70    49    1   2407
751   5500.   W   127.00   850000   N   B2    512    8.4   70    49    1   2207
752   4500.   W    10.02   850000   N   B2    512    8.4   70    49    1   2412
753   4500.   S    52.43   850000   N   B2    512   27.6   67    50    0   2503
754   5500.   S    40.94   850000   N   B2    512   27.6   67    50    0   2506
755   3500.   S    32.59   850000   N   B2    512   27.6   67    50    0   2201
756   4000.   W    12.41   850000   N   B2    512    8.4   70    49    1   2202
757   5500.   W    48.77   850000   N   B2    512    8.4   70    49    1   2303
758   4000.   W    35.30   850000   N   B2    512    8.4   70    49    1   2406
759   5500.   W    60.33   850000   N   B2    512    8.4   70    49    1   2302
760   4000.   W    41.11     2149   N   A2   2120    8.2   67    36    1   2604
761   4500.   W    73.88  1350000   N   A1     55   12.6   78    85    0   2608
762   4000.   W    73.29  1350000   N   A1     55   12.6   78    85    0   2502
763   4500.   S    33.40  1350000   N   A1     55   26.7   77   191    0   2412
764   4000.   W    42.30  1350000   N   A1     55   12.6   78    85    0   2406
765   4000.   W    20.14  1350000   N   A1     55   12.6   78    85    0   2502
766   4000.   W    92.37  1350000   N   A1     55   12.6   78    85    0   2604
767   4500.   W    18.69    20000   N   B2    400   12.5   78    85    0   2608
768   4000.   W    23.46      900   N   B2     70   12.6   78    85    0   2604
769   4000.   S    33.06      900   N   B2     70   46.7   77   191    0   2605
770   4500.   W    24.83    10000   N   A1    110   12.6   78    85    0   2412
771   4000.   W    14.02     6000   N   A1     90   12.6   78    85    0   2502
772   4500.   W    65.00     6600   N   A1     20   12.6   78    85    0   2606
773   3000.   W    42.42     6000   N   A1     30   12.6   78    85    0   2402
774   4000.   W    19.64     6000   N   A1     30   12.6   78    85    0   2202
775   4500.   W    17.31     3811   N   B2     20    6.2   71    22    0   2608
776   4000.   W    30.60   110000   N   A1     24   12.5   83   197    0   2202
777   3000.   W    23.22     2102   N   B2    250   10.5   75    36    1   2402
778   4000.   W    55.18    70000   N   B2    420   10.5   75    36    1   2502
779   4000.   W    30.90   700000   N   B2    701   10.5   75    36    1   2604
780   4000.   W    45.19   700000   N   B2    701   10.5   75    36    1   2502
781   4500.   W    10.15   700000   N   B2    701   10.5   75    36    1   2412
782   4000.   W    98.00   700000   N   B2    701   10.5   75    36    1   2502
783   5000.   S    70.89   700000   N   B2    701   26.7   74   117    0   2209
784   5500.   W    11.75   700000   N   B2    701   10.5   75    36    1   2508
785   5500.   W    31.85   700000   N   B2    701   10.5   75    36    1   2508
786   5000.   W    59.17    19000   N   A1    205   10.5   75    36    1   2209
787   5500.   W    33.65     7000   N   A1     35   10.5   75    36    1   2508
788   5500.   W   132.80   130000   N   A2   3576    2.3   57    11   38   2207
789   4000.   W    14.83   150000   N   A2   3241    4.8   59    11   28   2202
790   5000.   W    23.71    90000   N   A2   1738    6.9   69    29    1   2209
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791   4000.   W     35.88    320000   N     B6     3762     5.2    55    22    135    2405
792   4000.   W      9.35    500000   N     B2     5280     -.4    54     7     53    2405
793   4000.   W     19.85      2350   N     D6     6728     -.4    54     7     53    2502
794   3500.   S    159.20      2350   N     D6     6728    17.9    50    54      0    2201
795   4500.   W     36.30    135000   N     B3     6008    -2.2    48    11    160    2407
796   3000.   W    121.50     97500   N     B3     4700    -1.8    56     8    107    2402
797   5500.   W     17.18      4205   N     B4     6186     -.4    54     7     53    2508
798   4000.   W     21.35     12800   N     B5     6271    -6.9    70    17    244    2604
799   3000.   W     42.73      4462   N     B5     6748    -6.9    70    17    244    2601
800   5500.   W     39.06     75000   N     B3     2726      .7    73    43    117    2303
801   4000.   W     21.32     13300   N     B6     4525     -.2    74    34    224    2405
802   4000.   W      9.86     22000   S     B6     4300     -.2    74    34    224    2202
803   4500.   W     24.68      1025   N     B6     4600     -.2    74    34    224    2412
804   3000.   W     80.00     54000   N     B6     4549     -.2    74    34    224    2402
805   4000.   W     24.85    600000   N     B5     1090    10.3    54    15      1    2604
806   4000.   W     33.80     63000   S     B5     1240    10.3    54    15      1    2406
807   3000.   W     10.63     68000   S     B5     1250    10.3    54    15      1    2402
808   5000.   W     21.55     30000   N     A2      160    11.8    44     4      0    2209
809   4000.   W     17.97      7000   N     C5     3509    10.3    54    15      1    2604
810   4500.   W     47.56      3000   N     B6     3581     8.3    47     8      1    2407
811   5500.   W     72.43       140   N     B6     3800     8.3    47     8      1    2207
812   4000.   W     71.70    280000   N     B5     2390     8.3    47     8      1    2502
813   3000.   W     10.93     16000   N     B4     7300     0.0    62    13    124    2402
814   3000.   W    608.00     10400   N     D5     3779     4.2    64    14     36    2402
815   5500.   W     32.70       600   N     B5     4450     6.9    43    15      1    2303
816   3000.   W     23.77    130000   N     B5     2030     6.9    43    15      1    2601
817   3000.   W     23.78     75000   N     B6     4498     -.5    72    14    102    2402
818   5500.   W     43.89   2900000   N     B4      287    13.2    66    96      0    2303
819   4000.   W     52.45   2900000   N     B4      287    13.2    66    96      0    2405
820   3000.   W     23.48   2900000   N     B4      287    13.2    66    96      0    2601
821   4000.   W     20.32     27000   S     B4      125    13.2    66    96      0    2604
822   3000.   W     12.54    134000   S     B4       84    13.2    66    96      0    2402
823   3000.   W     24.08     30000   S     B4      140    13.2    66    96      0    2402
824   3000.   W     35.54     20000   S     B4       50    13.2    66    96      0    2601
825   4000.   S     30.70     20000   S     B4       50    18.1    80     1      0    2605
826   3000.   W      6.79    340000   N     B4       35    12.3    63   132      0    2601
827   3500.   W     31.59     40000   S     C5      800    13.2    66   132      0    2499
828   3000.   W    150.75     40000   S     C5      800    13.2    66   132      0    2601
829   3000.   W     48.18     30000   S     C5      300    13.2    66   132      0    2601
830   4000.   W      6.34     25000   S     C5      300    13.2    66   132      0    2502
831   4500.   W     19.64         0   S     B4      300    13.2    66   132      0    2412
832   4000.   W     35.17     43000   S     C5      374    13.2    66   132      0    2502
833   4500.   W     27.00     32000   S     C5      555    13.2    66   132      0    2407
834   3000.   W     16.37     32000   S     C5      555    13.2    66   132      0    2601
835   3000.   W     32.25     30000   S     C5      330    13.2    66   132      0    2601
836   3000.   W     17.83     68000   S     C5      390    13.2    66   132      0    2601
837   4500.   W     24.33      9000   S     B3       42    13.5    56    56      0    2407
838   3000.   W      9.02      9000   S     B3       42    13.5    56    56      0    2402
839   3000.   W     53.67     34000   S     B3      500    13.5    56    56      0    2601
840   4000.   W     25.67    700000   N     B3       42    13.5    56    56      0    2405
841   3000.   W     25.52    700000   N     B3       42    13.5    56    56      0    2601
842   4000.   W     23.31    700000   N     B3       42    13.5    56    56      0    2502
843   3500.   S     75.86    700000   N     B3       42    18.3    73     1      0    2501
844   4000.   W     28.00      5000   N     D6     2573    13.2    66   132      0    2406
845   4500.   W     67.22      1304   N     D5     1000     8.2    76    30      0    2407
846   4000.   W     21.81    150000   N     B4      858    13.2    66   132      0    2502
847   5500.   W     65.00    140000   S     B4       35    13.2    66   132      0    2303
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848	3000.	W	24.62	15000	N	C5	12	13.2	66	132	0	2402
849	4000.	W	29.93	4800	N	A1	246	6.9	81	32	0	2604
850	5500.	W	42.27	75000	N	A1	406	8.2	76	30	0	2303
851	4000.	W	23.76	2400	N	C5	200	9.9	67	118	0	2502
852	4500.	W	16.03	5800	N	C5	50	9.9	67	118	0	2407
853	3000.	W	32.61	97000	N	C5	130	9.2	1	60	0	2601
854	3000.	W	29.27	720000	N	C5	63	9.2	1	60	0	2601
855	4000.	W	20.35	720000	N	C5	63	9.2	1	60	0	2502
856	4500.	W	35.89	11000	S	C5	130	11.2	67	49	0	2412
857	4500.	W	18.08	79000	S	C5	55	11.2	67	49	0	2412
858	4000.	W	60.40	1360	N	C5	167	11.2	67	49	0	2406
859	3000.	W	26.30	4000	N	C5	300	9.2	1	60	0	2601
860	3000.	W	22.31	460000	N	C5	65	9.2	1	60	0	2402
861	3000.	W	36.67	460000	N	C5	65	9.2	1	60	0	2601
862	3000.	W	28.71	500	N	C5	2000	9.2	1	60	0	2601
863	4000.	W	10.14	350	N	A1	200	8.0	81	73	38	2502
864	3000.	W	15.09	6200	N	B3	42	6.7	84	154	38	2402
865	4000.	W	46.23	375000	N	B3	77	6.7	84	154	0	2502
866	5000.	W	35.33	70000	N	B3	160	6.1	81	176	0	2209
867	3500.	S	18.83	70000	N	B3	160	15.5	67	21	0	2499
868	3000.	W	88.54	70000	N	B3	160	6.1	81	176	0	2402
869	4000.	W	7.79	80000	N	B3	422	6.1	81	176	0	2202
870	5250.	W	14.47	1830	N	D5	200	6.1	81	176	0	2409
871	5250.	W	23.22	14000	N	D5	459	6.1	81	176	0	2409
872	4500.	W	19.76	61000	S	B3	100	5.8	82	164	249	2407
873	4000.	W	14.26	530000	N	B3	125	5.8	82	164	249	2502
874	3000.	W	23.00	530000	N	B3	125	5.8	82	164	249	2601
875	4000.	W	33.40	150000	N	B3	250	5.8	82	164	249	2405
876	4000.	W	46.00	150000	N	B3	250	5.8	82	164	249	2406
877	4000.	W	19.81	150000	N	B3	250	5.8	82	164	249	2405
878	4000.	W	17.39	325000	N	B6	18	24.3	70	15	0	2502
879	3000.	W	9.18	45000	N	C5	1066	1.9	83	29	41	2402
880	3000.	W	9.47	1500	N	C5	1500	-.8	88	65	422	2402
881	3000.	W	65.25	170000	N	B3	1900	-.8	88	65	422	2402
882	5000.	W	22.37	170000	N	B3	1900	-.8	88	65	422	2209
883	4000.	W	54.17	4100	N	C5	1038	1.8	83	29	41	2502
884	4500.	W	28.19	17000	N	D6	100	1.0	85	179	439	2407
885	4000.	S	17.24	14500	N	B4	356	17.6	76	84	-0	2502
886	5250.	S	53.22	165520	N	B4	200	17.6	76	84	-0	2409
887	4500.	S	39.13	18265	N	B4	250	17.6	76	84	-0	2204
888	4500.	S	30.21	52369	S	B2	165	19.7	70	53	-0	2608
889	3500.	S	37.35	52369	S	B2	165	19.7	70	53	-0	2501
890	4000.	S	23.00	4000	S	B2	150	19.7	70	53	-0	2502
891	5250.	S	28.44	32466	S	B2	150	19.7	70	53	-0	2505
892	4000.	S	38.76	86535	S	B3	71	19.7	70	53	-0	2202
893	4000.	S	93.33	23429	S	B2	21	19.7	70	53	-0	2604
894	4500.	S	45.36	2900	S	B2	180	19.7	70	53	-0	2407
895	5250.	S	33.93	-0	S	B2	20	19.7	70	53	-0	2505
896	4000.	S	23.43	103677	S	B2	20	19.7	70	53	-0	2405
897	4000.	S	26.52	28794	S	B2	44	19.7	70	53	-0	2502
898	3500.	S	25.14	29303	S	B2	162	19.7	70	53	-0	2501
899	5250.	S	11.04	3537	N	B2	60	19.7	70	53	-0	2505
900	4500.	S	45.08	1100	N	B2	50	19.7	70	53	-0	2204
901	3000.	S	31.61	7900	S	B2	212	19.7	70	53	-0	2402
902	3000.	S	560.00	6600	N	A1	30	18.9	70	120	-0	2601
903	3000.	S	67.08	5300	N	B2	332	18.9	72	120	-0	2402
904	4500.	S	17.79	4100	N	B2	306	18.9	72	120	-0	2412

905	5500.	S	31.11	77637	N	B2	201	18.9	72	120	-0	2207
906	5500.	S	5.04	77537	N	B2	201	18.9	72	120	-0	2303
907	3000.	S	33.40	-0	S	B2	30	18.9	72	120	-0	2601
908	5250.	S	52.06	400	N	B2	145	18.9	72	120	-0	2505
909	3500.	S	232.00	43500	N	B3	150	19.7	70	53	-0	2201
910	5250.	S	64.90	89500	N	B3	175	18.3	79	98	-0	2505
911	5500.	S	26.42	89500	N	B3	175	18.3	79	120	-0	2207
912	4000.	S	24.41	2400	N	B2	485	18.3	79	98	-0	2605
913	3000.	S	27.97	200	N	B2	50	16.4	82	124	-0	2601
914	4000.	S	37.59	450	N	B2	260	16.4	82	124	-0	2405
915	4000.	S	46.89	10800	N	B2	260	16.4	82	124	-0	2502
916	5250.	S	17.25	200	N	B3	340	16.4	82	124	-0	2409
917	4500.	S	32.91	2882	N	B3	340	16.4	82	124	-0	2204
918	5500.	S	35.07	10100	N	D5	485	19.1	70	63	-0	2207
919	4000.	S	24.79	28900	N	D5	300	19.1	70	63	-0	2405
920	3000.	S	27.61	300	N	D5	510	19.1	70	63	-0	2601
921	4500.	S	21.00	35000	N	B3	33	19.6	83	86	-0	2608
922	3000.	S	19.33	900	S	B3	45	19.6	83	86	-0	2601
923	3500.	S	50.63	10500	N	B3	90	19.6	83	86	-0	2499
924	3000.	S	25.24	40000	N	C3	52	20.2	71	97	-0	2402
925	4000.	S	25.89	900	S	B3	257	20.2	71	97	-0	2405
926	4500.	S	74.00	32000	N	B4	148	20.2	71	97	-0	2606
927	4500.	S	57.75	7673	N	B3	264	19.6	71	97	-0	2204
928	4000.	S	39.17	156000	N	B3	20	19.6	83	86	-0	2502
929	4000.	S	115.67	156000	N	B3	20	19.6	83	86	-0	2202
930	3000.	S	33.25	3000	N	C4	749	19.6	83	86	-0	2601
931	5250.	S	30.27	2541	N	B3	387	22.0	70	163	-0	2609
932	4000.	S	10.84	14800	S	B3	348	22.0	70	163	-0	2502
933	5500.	S	27.83	14800	S	B3	348	22.0	70	163	-0	2303
934	4500.	S	33.42	33500	S	B3	204	22.0	70	163	-0	2608
935	5250.	S	57.25	19700	N	B3	300	22.0	70	163	-0	2505
936	3500.	S	15.68	54500	S	B3	137	22.0	70	163	-0	2201
937	5250.	S	28.18	33200	S	B3	126	22.0	70	163	-0	2505
938	4500.	S	30.06	11300	S	C4	200	22.0	70	163	-0	2204
939	4000.	S	31.79	12400	S	C4	282	22.0	70	163	-0	2604
940	4000.	S	43.14	49000	N	C4	200	22.0	70	163	-0	2604
941	5500.	S	14.66	13500	N	C4	355	22.0	70	163	-0	2302
942	4000.	S	25.00	144000	N	C4	100	22.0	70	163	-0	2406
943	4500.	S	37.74	144000	N	C4	100	22.0	70	163	-0	2204
944	5250.	S	13.92	18800	S	C4	50	22.0	70	163	-0	2409
945	3000.	S	15.42	3399	N	B3	187	22.0	70	163	-0	2402
946	3500.	S	41.30	26000	S	C4	33	22.0	70	163	-0	2201
947	4000.	S	35.21	5100	N	A2	58	22.0	70	163	-0	2202
948	3500.	S	45.50	3000	N	A2	17	22.3	72	192	-0	2499
949	3500.	S	64.56	18800	N	C4	73	22.0	70	163	-0	2499
950	5250.	S	33.50	18800	N	C4	73	22.0	70	163	-0	2505
951	5000.	S	26.52	500	S	A2	327	22.3	72	192	-0	2209
952	3000.	S	243.00	8000	N	A1	95	22.3	72	192	-0	2601
953	5500.	S	25.96	-0	S	A1	40	20.6	78	179	-0	2207
954	4000.	S	15.08	-0	S	A1	30	20.5	78	179	-0	2405
955	4000.	S	13.66	-0	S	B2	60	20.9	70	183	-0	2202
956	5500.	S	23.33	8030000	N	A1	30	20.6	78	179	-0	2302
957	4000.	S	30.43	72913	S	B4	136	20.9	70	183	-0	2502
958	4500.	S	3.61	75206	S	B4	70	20.9	70	183	-0	2204
959	4000.	S	32.81	-0	S	A1	66	20.6	78	179	-0	2406
960	5250.	S	34.80	-0	S	A1	66	20.6	78	179	-0	2206
961	5500.	S	34.44	-0	S	A1	30	20.6	78	179	-0	2207

962	4500.	S	25.89	1000	N	A1	1370	20.6	78	179	-0	2608
963	4500.	S	20.40	23200	S	B2	115	20.6	78	179	-0	2606
964	3500.	S	19.32	18200	S	B2	25	20.6	78	179	-0	2499
965	4000.	S	26.97	28500	S	B2	106	20.9	70	183	-0	2405
966	5250.	S	34.24	24500	S	A1	50	20.6	78	179	-0	2206
967	4000.	S	63.91	13500	S	A1	180	20.6	78	179	-0	2202
968	3500.	S	32.63	4000	S	A1	25	20.6	78	179	-0	2201
969	5500.	S	48.35	250	N	C4	250	19.5	72	104	-0	2207
970	4000.	S	17.67	8852	N	C4	440	19.5	72	104	-0	2405
971	5250.	S	16.38	3308	N	C4	375	19.5	72	104	-0	2609
972	3000.	S	49.50	216000	N	C4	406	19.5	72	104	-0	2402
973	4000.	S	28.00	216000	N	C4	406	19.5	72	104	-0	2405
974	4500.	S	30.18	955	N	C4	990	19.5	72	104	-0	2407
975	4500.	S	72.89	18200	N	C4	895	19.5	72	104	-0	2204
976	5250.	S	23.22	3600	N	C4	370	19.5	72	104	-0	2505
977	4000.	S	17.20	25500	N	C4	600	19.5	72	104	-0	2406
978	3500.	S	21.43	26500	N	C4	600	19.5	72	104	-0	2499
979	4500.	S	26.17	21000	S	C4	610	20.0	75	93	-0	2503
980	4000.	S	71.88	101000	N	C4	610	20.4	75	93	-0	2502
981	4000.	S	40.08	10058	N	C4	767	19.5	72	104	-0	2405
982	4000.	S	37.63	2693	N	C4	40	19.5	72	104	-0	2502
983	3000.	S	84.00	600	N	C4	585	19.5	72	104	-0	2402
984	4000.	S	6.71	25058	N	C4	490	19.5	72	104	-0	2605
985	3000.	S	35.64	305000	N	C4	515	19.5	72	104	-0	2402
986	4000.	S	14.19	305000	N	C4	515	19.5	72	104	-0	2502
987	4500.	S	30.47	305000	N	C4	515	19.5	72	104	-0	2407
988	4000.	S	21.73	305000	N	C4	515	19.5	72	104	-0	2202
989	4500.	S	47.89	1949	N	B3	1500	19.5	72	104	-0	2407
990	4500.	S	10.31	16500	N	B3	937	19.5	72	104	-0	2204
991	4000.	S	47.00	650	N	B3	1000	19.5	72	104	-0	2202
992	4000.	S	26.18	15600	N	D4	800	19.9	66	116	-0	2604
993	3500.	S	32.31	15600	N	D4	800	19.9	66	116	-0	2201
994	4000.	S	24.68	17400	S	D4	1491	19.9	66	116	-0	2604
995	4000.	S	18.18	15000	N	D4	1017	19.9	66	116	-0	2502
996	4000.	S	25.24	1695	S	D4	902	19.9	66	116	-0	2604
997	5250.	S	15.59	30471	S	D4	1060	19.9	66	116	-0	2505
998	4500.	S	23.00	17000	S	D4	1000	19.9	66	116	-0	2606
999	3000.	S	50.60	6157	S	D4	720	19.9	66	116	-0	2402
1000	4000.	S	7.07	560000	N	D4	760	19.9	66	116	-0	2502
1001	4000.	S	423.00	560000	N	D4	760	19.9	66	116	-0	2604
1002	5250.	S	121.56	560000	N	D4	760	19.9	66	116	-0	2505
1003	3500.	S	40.95	22500	N	D4	1020	19.9	66	116	-0	2499
1004	4500.	S	88.00	1865	S	D4	960	19.9	66	116	-0	2608
1005	3000.	S	28.33	1313	N	D4	1260	19.9	66	116	-0	2601
1006	5250.	S	65.82	11800	N	C4	1020	19.9	66	116	-0	2505
1007	3500.	S	50.45	8805	N	C4	1235	19.9	66	116	-0	2499
1008	4000.	S	19.03	3109	N	C4	1470	19.9	66	116	-0	2605
1009	4500.	S	19.53	900	N	C4	1600	19.9	66	116	-0	2412
1010	5250.	S	34.29	19900	N	C4	1077	19.9	66	116	-0	2609
1011	4000.	S	15.42	1522	N	D4	1031	19.9	66	116	-0	2604
1012	5250.	S	69.67	6400	N	D5	800	19.9	66	116	-0	2409
1013	4000.	S	47.80	17000	N	D5	1000	20.3	74	70	-0	2502
1014	5500.	S	45.63	17000	N	D5	1000	20.3	74	70	-0	2508
1015	5250.	S	24.27	1399	N	B2	790	19.7	78	111	-0	2505
1016	3000.	S	10.22	14400	N	C4	1443	19.2	76	74	-0	2601
1017	4500.	S	82.89	27800	N	C5	1154	21.5	77	165	-0	2606
1018	4500.	S	147.33	4369	N	C4	1311	19.2	76	74	-0	2606

1019	4000.	S	30.87	9300	N	C5	420	21.5	77	165	-0	2604
1020	5250.	S	29.85	8700	N	C5	462	21.5	77	165	-0	2609
1021	4000.	S	33.06	75000	N	B2	360	21.5	77	165	-0	2405
1022	4500.	S	14.34	75000	N	B2	360	21.5	77	165	-0	2412
1023	3000.	S	16.54	10200	N	C5	713	21.5	77	165	-0	2601
1024	4000.	S	20.91	1037	N	C5	430	21.5	77	165	-0	2605
1025	5500.	S	19.06	2773	N	C5	571	21.5	77	165	-0	2207
1026	3500.	S	30.58	5594	N	B2	911	21.5	77	165	-0	2499
1027	5250.	S	22.09	900	N	B3	360	20.7	68	129	-0	2409
1028	5250.	S	14.45	6176	N	B3	490	20.7	68	129	-0	2609
1029	3500.	S	45.43	30	N	B3	840	20.7	68	129	-0	2499
1030	4500.	S	18.71	73000	N	B3	340	20.7	68	129	-0	2412
1031	3500.	S	70.44	3693	N	B3	820	20.7	68	129	-0	2499
1032	4500.	S	49.33	6318	N	B3	502	20.7	68	129	-0	2608
1033	5250.	S	67.78	1212	N	C4	1600	20.4	72	143	-0	2609
1034	4500.	S	29.35	464	S	C4	1200	20.4	72	143	-0	2503
1035	5500.	S	29.31	6765	S	B3	214	22.3	72	192	-0	2207
1036	4500.	S	139.00	4000	S	B3	170	22.3	72	192	-0	2407
1037	4000.	S	56.33	6700	S	B3	220	22.3	72	192	-0	2202
1038	4000.	S	15.07	2030000	N	B3	45	22.3	72	192	-0	2405
1039	4500.	S	15.10	2030000	N	B3	45	22.3	72	192	-0	2204
1040	5500.	S	31.40	2030000	N	B3	45	22.3	72	192	-0	2302
1041	4000.	S	20.12	40500	S	B3	130	22.3	72	192	-0	2502
1042	5250.	S	9.89	92500	N	A1	120	21.9	70	156	-0	2409
1043	4500.	S	25.72	92500	N	A1	120	21.9	70	156	-0	2608
1044	5500.	S	21.08	92500	N	A1	120	21.9	70	156	-0	2303
1045	5500.	S	22.29	810000	N	B2	150	24.7	64	55	-0	2506
1046	3000.	S	87.43	810000	N	B2	150	24.7	64	55	-0	2402
1047	3000.	S	33.50	10400	N	B2	160	24.7	64	55	-0	2601
1048	5500.	S	23.46	1400	N	B2	200	24.7	64	55	-0	2506
1049	4000.	S	40.25	22500	N	B2	60	22.8	73	97	-0	2605
1050	5500.	S	29.45	300	S	B2	32	22.8	73	97	-0	2302
1051	4000.	S	56.33	3000	N	B3	560	22.8	73	97	-0	2604
1052	5250.	S	27.32	3500	N	B2	40	22.8	73	97	-0	2609
1053	5250.	S	41.27	925000	N	B2	32	22.8	73	97	-0	2206
1054	4500.	S	25.65	200	N	C5	829	22.8	73	97	-0	2503
1055	3000.	S	59.50	35500	N	C5	552	22.8	73	97	-0	2402
1056	4500.	S	22.97	35500	N	C5	552	22.8	73	97	-0	2503
1057	5250.	S	34.06	1500	N	B3	620	21.6	73	180	-0	2505
1058	4500.	S	28.82	12500	S	B3	337	21.6	77	180	-0	2407
1059	3000.	S	35.85	15000	S	B3	300	24.7	64	55	-0	2402
1060	4000.	S	40.89	15200	S	B3	370	21.6	77	180	-0	2502
1061	5250.	S	28.19	173000	S	B3	200	24.7	64	55	-0	2206
1062	4000.	S	40.07	223000	N	B2	150	23.1	72	102	-0	2502
1063	3500.	S	14.69	100500	N	B4	948	21.9	69	39	-0	2501
1064	3500.	S	72.75	3000	N	D5	640	22.1	72	108	-0	2201
1065	5250.	S	28.63	85000	N	D5	620	22.1	72	108	-0	2409
1066	5250.	S	24.54	50000	N	D4	550	19.9	66	116	-0	2505
1067	5500.	S	25.07	10100	N	B3	853	24.0	73	43	-0	2302
1068	4000.	S	18.40	2100	N	B3	750	24.0	73	43	-0	2202
1069	5500.	S	100.37	1247	N	B2	841	24.0	73	43	-0	2303
1070	4500.	S	46.73	2942	N	B2	841	24.0	73	43	-0	2412
1071	5500.	S	12.51	131711	N	B2	841	24.0	73	43	-0	2207
1072	4500.	S	40.45	2412	N	B2	404	21.5	77	180	-0	2606
1073	5500.	S	19.65	25000	N	A2	55	23.2	72	42	-0	2207
1074	5500.	S	55.13	400	N	B2	55	23.9	66	47	-0	2506
1075	4000.	S	11.37	16941	N	B2	853	23.9	66	47	-0	2202

1076	4000.	S	23.26	51500	Z	B2	102	23.2	72	42	-0	2502
1077	3500.	S	22.78	51500	Z	B2	102	23.2	72	42	-0	2501
1078	3000.	S	29.25	51500	Z	B2	102	23.2	72	42	-0	2402
1079	4000.	S	44.08	5911	Z	B4	2146	20.4	79	54	-0	2502
1080	5500.	S	39.38	47000	Z	B4	816	23.5	72	137	-0	2506
1081	3500.	S	59.06	300	Z	A1	5	26.4	75	53	-0	2499
1082	4000.	S	51.06	2411	Z	B3	868	24.1	73	140	-0	2406
1083	4500.	S	50.18	366	Z	B2	1088	24.1	73	140	-0	2412
1084	5500.	S	27.24	1253	Z	B2	890	24.1	73	140	-0	2207
1085	3000.	S	18.36	335000	Z	B2	1057	24.1	73	140	-0	2601
1086	5250.	S	25.46	41000	S	B2	1055	24.1	73	140	-0	2505
1087	4500.	S	31.44	1169	Z	B2	299	25.2	73	94	-0	2503
1088	5250.	S	64.33	623	Z	A1	636	27.2	76	132	-0	2505
1089	3500.	S	17.10	10100	Z	A1	8	26.4	80	229	-0	2501
1090	4000.	S	19.71	38500	Z	A1	190	26.7	79	121	-0	2604
1091	4500.	S	65.71	3700	Z	A1	55	26.7	79	121	-0	2412
1092	3500.	S	41.56	60500	Z	A1	11	27.3	77	116	-0	2499
1093	4500.	S	37.13	4108	Z	A1	17	27.3	77	116	-0	2606
1094	5250.	S	41.38	67000	Z	A1	15	27.5	78	162	-0	2505
1095	4500.	S	10.29	7000	S	A1	10	27.5	78	162	-0	2407
1096	4000.	S	32.15	325000	Z	A1	10	27.5	78	162	-0	2604
1097	4000.	S	30.67	5295	Z	A1	19	26.4	80	182	-0	2604
1098	4000.	S	37.59	12749	Z	A1	48	26.4	80	182	-0	2502
1099	4000.	S	12.51	42500	Z	A1	24	28.1	74	222	-0	2604
1100	3500.	S	61.80	5556	Z	A1	15	28.1	74	222	-0	2501
1101	4000.	S	33.20	15700	S	A1	15	28.1	74	222	-0	2405
1102	5500.	S	22.43	365000	Z	A1	57	28.1	74	222	-0	2207
1103	3500.	S	109.50	345000	Z	C4	601	24.7	71	62	-0	2501
1104	5500.	S	69.50	345000	Z	C4	601	24.7	71	62	-0	2508
1105	3500.	S	34.30	127000	Z	B2	641	24.2	71	117	-0	2501
1106	4500.	S	44.42	148000	Z	B2	287	25.1	79	121	-0	2407
1107	4000.	S	32.94	35000	Z	A1	326	26.7	79	121	-0	2405
1108	5250.	S	151.25	4321	Z	B2	193	25.1	79	121	-0	2409
1109	4500.	S	40.75	14000	Z	B2	700	25.8	72	100	-0	2606
1110	5250.	S	27.00	250	Z	C3	518	24.4	72	56	-0	2409
1111	4500.	S	25.00	261000	Z	C3	591	24.4	72	56	-0	2606
1112	5250.	S	14.21	7170	Z	B2	717	24.2	71	117	-0	2409
1113	5250.	S	30.48	127500	Z	C5	685	22.7	77	100	-0	2505
1114	4500.	S	20.03	131000	Z	C3	339	23.7	77	62	-0	2204
1115	4000.	S	23.84	1005	Z	B2	889	26.0	58	61	-0	2605
1116	5500.	S	43.94	13500	Z	B2	295	26.0	68	61	-0	2506
1117	4500.	S	31.38	555000	Z	A1	254	26.0	68	61	-0	2608
1118	4000.	S	24.37	555000	Z	A1	264	26.0	68	61	-0	2202
1119	4000.	S	51.64	9900	Z	C3	519	24.4	72	56	-0	2405
1120	5250.	S	57.27	5530	Z	B2	448	26.0	68	61	-0	2505
1121	5250.	S	92.86	708	Z	C3	420	26.0	68	61	-0	2505
1122	5500.	S	57.00	5283	Z	B2	460	26.0	68	61	-0	2207
1123	4000.	S	37.50	250	Z	A1	100	26.0	68	61	-0	2406
1124	5250.	S	15.74	343	Z	B2	290	25.7	80	189	-0	2206
1125	5500.	S	39.94	161000	Z	B2	294	25.7	80	189	-0	2302
1126	4500.	S	39.13	161000	Z	B2	294	25.7	80	189	-0	2407
1127	3500.	S	23.85	46500	Z	A1	25	26.3	83	312	-0	2201
1128	4000.	S	60.77	1106	Z	A1	50	26.3	93	312	-0	2202
1129	5500.	S	43.06	27500	Z	C3	200	24.7	71	62	-0	2207
1130	4500.	S	34.31	392000	Z	B2	465	24.1	66	80	-0	2412
1131	3000.	S	14.04	392000	Z	B2	465	24.1	66	80	-0	2402
1132	5250.	S	29.63	392000	Z	B2	465	24.1	66	80	-0	2505

1133	5500.	S	38.11	79000	N	B2	983	23.1	68	57	-0	2302
1134	3000.	S	22.32	79000	N	B2	983	23.1	68	57	-0	2601
1135	5250.	S	65.44	3324	N	B2	760	24.4	72	56	-0	2609
1136	3500.	S	37.56	22800	N	B2	548	24.4	72	56	-0	2499
1137	4500.	S	20.48	950	N	B2	409	24.4	72	56	-0	2407
1138	4500.	S	21.47	11000	S	A2	910	22.4	77	90	-0	2204
1139	5250.	S	157.33	732	N	B2	880	22.4	77	90	-0	2609
1140	5250.	S	38.60	1976	S	A2	595	22.4	77	90	-0	2505
1141	4000.	S	22.11	540000	N	A2	700	22.4	77	90	-0	2604
1142	4500.	S	40.43	540000	N	A2	700	22.4	77	90	-0	2608
1143	5500.	S	170.50	540000	N	A2	700	22.4	77	90	-0	2508
1144	4500.	S	37.41	540000	N	A2	700	22.4	77	90	-0	2503
1145	5500.	S	22.71	8747	N	A2	991	22.4	77	90	-0	2302
1146	4500.	S	22.93	15000	S	A1	631	20.6	75	107	-0	2606
1147	3500.	S	50.86	354000	N	A1	587	20.6	75	107	-0	2201
1148	5250.	S	39.95	354000	N	A1	587	20.6	75	107	-0	2609
1149	5500.	S	33.55	354000	N	A1	587	20.6	75	107	-0	2506
1150	5250.	S	26.65	354000	N	A1	587	20.5	75	107	-0	2206
1151	4000.	S	16.07	4273	N	B3	531	20.5	75	107	-0	2202
1152	4500.	S	7.94	34500	N	C4	715	19.9	66	116	-0	2503
1153	4500.	S	21.82	6500	N	A2	630	21.0	76	104	-0	2608
1154	5250.	S	101.75	10400	N	A2	700	21.0	76	104	-0	2609
1155	4500.	S	14.45	30000	N	B2	690	21.0	76	104	-0	2204
1156	4500.	S	36.20	3500	N	B3	550	21.0	76	104	-0	2204
1157	4500.	S	19.94	3599	N	B2	625	20.8	73	70	-0	2407
1158	4500.	S	67.00	16800	N	A2	625	21.0	76	104	-0	2204
1159	3000.	S	15.62	810858	N	A2	680	21.0	76	104	-0	2402
1160	4000.	S	12.24	16500	S	A2	1050	21.0	75	104	-0	2405
1161	3500.	S	29.74	9631	S	A2	1150	21.0	76	104	-0	2501
1162	4500.	S	27.96	43000	S	A2	940	21.0	76	104	-0	2606
1163	4500.	S	13.39	15800	S	A2	630	21.0	76	104	-0	2503
1164	4500.	S	22.36	8000	S	A2	680	21.0	76	104	-0	2412
1165	4000.	S	37.17	900	N	B3	1050	20.8	73	70	-0	2502
1166	3500.	S	16.34	12308	N	B3	1050	20.8	73	70	-0	2501
1167	4500.	S	37.67	924	N	B3	780	20.8	73	70	-0	2503
1168	5500.	S	42.39	51000	N	B3	1030	20.8	73	70	-0	2508
1169	4000.	S	45.29	52500	N	B3	895	20.3	74	70	-0	2604
1170	4500.	S	69.10	162000	N	C4	840	20.3	74	70	-0	2608
1171	4500.	S	11.53	11700	N	D3	898	20.8	73	70	-0	2608
1172	4500.	S	188.50	1521	N	D3	1050	20.8	73	70	-0	2606
1173	4500.	S	13.79	33800	N	A2	600	21.0	76	104	-0	2204
1174	5000.	S	24.15	49000	N	B3	1230	20.8	73	70	-0	2209
1175	4000.	S	33.00	73000	N	B3	605	23.2	73	86	-0	2605
1176	5250.	S	60.00	343	N	B3	605	23.2	73	86	-0	2505
1177	3000.	S	37.00	5600	N	B3	539	23.2	73	86	-0	2402
1178	4500.	S	47.67	495000	N	B3	550	23.2	73	86	-0	2412
1179	5500.	S	26.82	495000	N	B3	550	23.2	73	86	-0	2303
1180	4500.	S	27.96	495000	N	B3	550	23.2	73	86	-0	2204
1181	5500.	S	34.36	4403	N	B3	550	23.2	73	86	-0	2508
1182	4000.	S	41.00	15300	N	A2	820	22.0	73	57	-0	2502
1183	4500.	S	23.36	260000	N	A2	757	22.0	73	57	-0	2407
1184	5250.	S	14.57	260000	N	A2	757	22.0	73	57	-0	2409
1185	4500.	S	31.29	260000	N	A2	757	22.0	73	57	-0	2407
1186	5250.	S	353.33	82500	N	A2	980	22.4	77	90	-0	2409
1187	3000.	S	45.71	56000	N	A2	880	22.0	73	57	-0	2601
1188	5500.	S	63.33	32800	N	A2	780	20.9	78	112	-0	2508
1189	5250.	S	12.34	5582	N	A2	855	21.9	78	146	-0	2206

1190	3500.	S	50.77	613	N	A2	710	21.9	78	146	-0	2499
1191	5250.	S	49.69	453	N	A2	890	21.9	78	146	-0	2505
1192	5500.	S	42.00	8400	N	A2	810	21.9	78	146	-0	2506
1193	4500.	S	71.67	530000	N	A2	710	21.9	78	146	-0	2503
1194	5500.	S	81.12	530000	N	A2	710	21.9	78	146	-0	2506
1195	4500.	S	19.20	530000	N	A2	710	21.9	78	146	-0	2204
1196	4000.	S	33.53	530000	N	A2	710	21.9	78	146	-0	2604
1197	5500.	S	100.67	56500	S	A2	595	22.3	71	118	-0	2207
1198	4500.	S	10.56	12800	S	A2	515	22.3	71	118	-0	2204
1199	4000.	S	24.44	115500	S	A2	590	22.3	71	118	-0	2605
1200	5250.	S	17.07	650	N	A1	730	20.9	78	112	-0	2206
1201	5500.	S	48.85	1434	N	B2	730	20.9	78	112	-0	2508
1202	3500.	S	24.17	1284	N	B2	885	20.9	78	112	-0	2499
1203	5250.	S	13.12	172000	N	B2	790	20.9	78	112	-0	2409
1204	5500.	S	31.47	8100	N	B2	940	23.2	73	86	-0	2506
1205	4500.	S	40.39	316	N	A2	870	20.9	78	112	-0	2412
1206	5250.	S	5.67	6999	N	A2	910	20.9	78	112	-0	2505
1207	5000.	S	57.00	890	N	A2	1005	20.9	78	112	-0	2209
1208	4500.	S	45.64	2335	N	A2	630	20.9	78	112	-0	2407
1209	5250.	S	40.79	603	N	A2	320	20.9	78	112	-0	2206
1210	5500.	S	48.00	70500	N	B2	496	21.9	78	146	-0	2506
1211	5250.	S	30.41	8853	N	B2	659	21.9	78	146	-0	2609
1212	5500.	S	42.28	250	N	A2	820	21.8	67	146	-0	2508
1213	4000.	S	16.58	26300	S	A2	775	21.8	67	82	-0	2605
1214	4000.	S	25.15	9600	S	B2	615	21.8	67	82	-0	2202
1215	5500.	S	39.10	9600	S	B2	615	21.8	67	82	-0	2207
1216	4000.	S	52.82	10000	S	B2	930	21.8	67	82	-0	2605
1217	4000.	S	21.85	10000	S	B2	930	21.8	67	82	-0	2604
1218	5250.	S	17.14	2698	N	A2	990	19.5	75	119	-0	2409
1219	5250.	S	72.36	20500	N	A1	600	21.8	67	82	-0	2205
1220	5250.	S	14.54	34000	N	B2	930	21.9	67	82	-0	2609
1221	5250.	S	39.72	90000	S	A1	900	21.8	67	82	-0	2609
1222	5500.	S	20.84	34800	S	A1	850	21.8	67	82	-0	2303
1223	4000.	S	31.81	85000	S	A1	850	21.8	67	82	-0	2605
1224	4000.	S	16.04	85000	S	A1	850	21.8	67	82	-0	2202
1225	5250.	S	77.75	82000	S	A1	950	21.8	67	82	-0	2409
1226	3000.	S	20.14	149000	S	A1	950	21.8	67	82	-0	2402
1227	4000.	S	16.32	149000	S	A1	950	21.8	67	82	-0	2604
1228	4500.	S	72.89	8400	S	A1	985	21.8	67	82	-0	2407
1229	4000.	S	13.11	80000	N	B2	880	21.8	67	82	-0	2405
1230	3000.	S	92.50	80000	N	B2	880	21.8	67	82	-0	2402
1231	4000.	S	46.85	80000	N	B2	880	21.8	67	82	-0	2202
1232	4500.	S	42.33	111000	N	A1	605	21.8	67	82	-0	2608
1233	4500.	S	14.16	80000	N	B2	880	21.8	67	82	-0	2204
1234	5250.	S	18.17	80000	N	B2	880	21.8	67	82	-0	2609
1235	3500.	S	14.16	7600	S	A1	600	21.8	67	82	-0	2499
1236	3500.	S	18.78	39500	S	A1	750	21.8	67	82	-0	2499
1237	4000.	S	57.21	22500	S	A1	590	20.6	75	107	-0	2405
1238	4000.	S	24.70	56000	S	A1	600	21.8	67	82	-0	2502
1239	4500.	S	65.80	35000	S	A1	600	21.8	67	82	-0	2608
1240	5250.	S	31.00	160000	N	A1	600	21.8	67	82	-0	2409
1241	4000.	S	34.13	160000	N	A1	600	21.8	67	82	-0	2605
1242	5500.	S	41.13	160000	N	A1	600	21.8	67	82	-0	2508
1243	4000.	S	207.75	160000	N	A1	600	21.8	67	82	-0	2202
1244	4000.	S	21.71	160000	N	A1	600	21.8	67	82	-0	2202
1245	4500.	S	32.50	160000	N	A1	600	21.8	67	82	-0	2503
1246	4500.	S	38.50	3312	N	A2	790	19.6	75	119	-0	2407

1247	4500.	S	49.38	452	N	A2	1055	19.6	75	119	-0	2606
1248	4000.	S	20.00	202000	N	A2	715	19.6	75	119	-0	2406
1249	5500.	S	22.61	202000	N	A2	715	19.6	75	119	-0	2207
1250	4500.	S	45.79	99000	N	A1	595	19.6	75	119	-0	2204
1251	5500.	S	19.03	99000	N	A1	595	19.6	75	119	-0	2207
1252	5250.	S	41.11	5000	N	B2	830	20.2	77	74	-0	2505
1253	3000.	S	65.78	126000	N	B2	830	20.2	77	74	-0	2402
1254	5250.	S	34.17	86000	N	A2	755	19.8	78	152	-0	2609
1255	4000.	S	31.87	42500	N	B2	820	20.2	77	74	-0	2406
1256	3500.	S	28.14	42500	N	B2	820	20.2	77	74	-0	2501
1257	5500.	S	17.85	42500	N	B2	820	20.2	77	74	-0	2506
1258	4500.	S	37.93	971	N	A2	473	21.3	76	139	-0	2503
1259	3500.	S	75.15	3125	N	A2	739	19.8	78	152	-0	2499
1260	5250.	S	33.39	50500	N	B2	940	20.2	77	74	-0	2409
1261	4500.	S	34.50	2653	N	A1	695	20.6	75	107	-0	2503
1262	4000.	S	45.29	300	N	A1	985	20.6	75	107	-0	2406
1263	5250.	S	34.75	203000	N	B2	610	19.8	78	152	-0	2205
1264	4500.	S	19.16	203000	N	B2	610	19.8	78	152	-0	2606
1265	5250.	S	18.14	203000	N	B2	610	19.8	78	152	-0	2206
1266	3000.	S	54.29	718	N	B2	905	19.8	78	152	-0	2402
1267	5250.	S	52.33	600	N	A2	1185	17.8	74	96	-0	2409
1268	5250.	S	31.76	4722	N	A2	927	17.8	74	96	-0	2505
1269	5250.	S	15.91	21000	N	B2	520	16.2	77	117	-0	2505
1270	5250.	S	49.42	5910	N	B2	975	22.4	71	152	-0	2609
1271	4500.	S	40.81	460	N	B2	1230	22.4	71	152	-0	2606
1272	5500.	S	85.44	13720	N	B2	850	22.5	71	152	-0	2506
1273	3500.	S	51.82	206739	N	B2	803	22.5	71	152	-0	2499
1274	3500.	S	49.56	206739	N	B2	803	22.5	71	152	-0	2201
1275	4000.	S	13.88	206739	N	B2	803	22.5	71	152	-0	2405
1276	3000.	S	39.57	430	N	B2	1155	20.8	72	136	-0	2601
1277	5250.	S	70.09	2323	N	A2	1166	21.7	70	102	-0	2505
1278	4500.	S	21.54	3354	N	B2	1201	20.8	72	136	-0	2407
1279	4000.	S	16.73	1523	N	C2	1440	22.5	70	109	-0	2406
1280	3000.	S	53.60	1340	N	C2	1103	22.5	70	109	-0	2402
1281	4500.	S	35.32	59500	N	C3	650	20.3	71	95	-0	2606
1282	4000.	S	20.18	4616	N	B2	829	20.3	71	95	-0	2502
1283	3500.	S	99.22	4899	N	B2	800	21.7	70	102	-0	2501
1284	3500.	S	53.09	1085	N	B2	633	22.4	71	152	-0	2499
1285	5250.	S	9.57	103545	N	B2	730	20.3	71	95	-0	2409
1286	3000.	S	9.27	103545	N	B2	730	20.3	71	95	-0	2601
1287	4000.	S	22.48	103545	N	B2	730	20.3	71	95	-0	2502
1288	4000.	S	23.24	34000	N	C2	650	22.4	71	152	-0	2202
1289	3000.	S	38.04	4061	N	B2	670	18.7	80	101	-0	2601
1290	4500.	S	64.22	12900	N	B2	895	18.7	80	101	-0	2606
1291	5250.	S	14.54	21400	S	B2	715	18.7	80	101	-0	2609
1292	4500.	S	37.86	765000	N	B2	630	18.7	80	101	-0	2606
1293	4000.	S	21.31	765000	N	B2	630	18.7	80	101	-0	2604
1294	5500.	S	8.60	765000	N	B2	630	18.7	80	101	-0	2303
1295	4000.	S	52.31	765000	N	B2	630	18.7	80	101	-0	2405
1296	4500.	S	45.06	3800	S	B2	610	18.7	80	101	-0	2606
1297	4500.	S	44.89	9800	S	B2	610	18.7	80	101	-0	2503
1298	4000.	S	49.82	765000	N	B2	630	18.7	80	101	-0	2605
1299	4000.	S	28.22	94500	N	A2	630	18.7	80	101	-0	2502
1300	4000.	S	20.95	159000	N	B2	860	20.7	68	109	-0	2605
1301	3500.	S	355.00	6957	N	C3	920	20.3	71	95	-0	2501
1302	4000.	S	76.63	522	N	B2	850	20.7	68	109	-0	2604
1303	4500.	S	19.76	82500	N	A2	590	18.5	77	134	-0	2608

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1304   4500.   S      6.24     32500   N   A2    590   18.5   77   134   -0   2407
1305   5250.   S     31.55     82500   N   A2    590   18.5   77   134   -0   2609
1306   4500.   S     48.33     32000   N   B2   1165   18.5   77   134   -0   2407
1307   5250.   S     18.47     32000   N   B2   1165   18.5   77   134   -0   2609
1308   4500.   S     27.54       660   N   B2    943   20.4   69   203   -0   2412
1309   3500.   S     22.59       815   N   B2   1095   20.4   69   203   -0   2499
1310   4000.   S     44.33     33000   N   A2    630   14.4   81   142   -0   2502
1311   4500.   S     39.07     15300   N   A2    765   18.5   77   134   -0   2606
1312   4500.   S     45.32     10531   S   B2   1000   20.4   69   203   -0   2204
1313   4000.   S     71.25     19410   S   B2    929   20.4   69   203   -0   2604
1314   4000.   S     21.53     19410   S   B2    929   20.4   69   203   -0   2502
1315   3000.   S     33.13    465000   N   B2    840   20.4   69   203   -0   2402
1316   4000.   S     24.60    465000   N   B2    840   20.4   69   203   -0   2202
1317   4500.   S     26.05     29581   S   B2    950   20.4   69   203   -0   2503
1318   3500.   S     83.86     13064   S   B2   1000   20.4   69   203   -0   2501
1319   4500.   S     44.06       694   N   A2   1289   20.5   74    73   -0   2503
1320   5500.   S     85.38       980   N   B2   1432   18.4   77   239   -0   2506
1321   4000.   S    107.83     35800   N   A2   1580   16.7   68    87   -0   2405
1322   5250.   S     21.53     16500   N   C4   4810   13.8   60    84   -0   2206
1323   5500.   S     77.88     50789   N   A2    640   21.4   74   129   -0   2506
1324   4500.   S     46.33     50789   N   A2    640   21.4   74   129   -0   2204
1325   5250.   S     91.75     23200   S   A2    635   21.4   74   129   -0   2609
1326   4500.   S     23.47      4345   N   A2    685   21.4   74   129   -0   2204
1327   5500.   S     32.86      3336   N   A2    595   21.4   68   119   -0   2207
1328   5500.   S      9.51     54000   N   A2    595   21.4   74   129   -0   2508
1329   3500.   S     23.40     12100   N   A2    650   21.4   74   129   -0   2499
1330   4000.   S     28.35      4500   N   A2    770   21.4   74   129   -0   2502
1331   5500.   S     84.11     81000   S   A2    600   21.4   74   129   -0   2302
1332   4000.   S     27.26     81000   S   A2    600   21.4   74   129   -0   2502
1333   4000.   S     43.00     69500   N   A2    640   22.3   71   118   -0   2405
1334   4500.   S     50.00      3714   N   A2    620   22.3   71   118   -0   2407
1335   5500.   S     34.50       933   S   A2    620   22.3   71   118   -0   2506
1336   5250.   S     15.83     15200   S   A2    600   22.3   71   118   -0   2206
1337   4000.   S     37.06     10600   S   A2    615   22.3   71   118   -0   2405
1338   4000.   S     45.47     11600   S   A2    719   22.3   71   118   -0   2604
1339   4000.   S     36.29     14738   S   A2    690   22.3   71   118   -0   2406
1340   3000.   S     18.70     14738   S   A2    690   22.3   71   118   -0   2601
1341   4500.   S     38.84     14738   S   A2    690   22.3   71   118   -0   2204
1342   3000.   S     27.35   3520000   N   A2    595   22.3   71   118   -0   2601
1343   5500.   S     90.86   3520000   N   A2    595   22.3   71   118   -0   2302
1344   4500.   S     17.62   3520000   N   A2    595   22.3   71   118   -0   2204
1345   4500.   S     17.05   3520000   N   A2    595   22.3   71   118   -0   2407
1346   4500.   S     43.00   3520000   N   A2    595   22.3   71   118   -0   2608
1347   4000.   S     32.33   3520000   N   A2    595   22.3   71   118   -0   2605
1348   3500.   S     30.00   3520000   N   A2    595   22.3   71   118   -0   2501
1349   5250.   S     18.23   3520000   N   A2    595   22.3   71   118   -0   2505
1350   4000.   S     24.40   3520000   N   A2    595   22.3   71   118   -0   2502
1351   4500.   S      7.79     27800   N   A1    630   22.3   71   118   -0   2204
1352   5500.   S     21.05      7554   N   A2    795   21.4   68   119   -0   2508
1353   5500.   S     43.50       659   N   A2    655   21.4   68   119   -0   2303
1354   5250.   S     23.14     11443   N   B2    470   21.4   68   119   -0   2505
1355   4500.   S     13.91       386   N   B2    780   21.4   68   119   -0   2407
1356   4500.   S     16.76    127000   N   B2    470   21.4   68   119   -0   2407
1357   5250.   S     25.27    127000   N   B2    470   21.4   68   119   -0   2409
1358   5500.   S     69.00      1600   N   A2    660   23.1   69   111   -0   2207
1359   3500.   S     50.00     43200   N   A2    605   23.1   69   111   -0   2499
1360   4000.   S     26.52     12100   N   B2    760   23.8   72    96   -0   2405
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1361	4000.	S	24.52	3452	N	B2	545	23.8	72	96	-0	2502
1362	3500.	S	33.29	4363	N	B2	470	23.1	69	111	-0	2501
1363	4000.	S	29.58	87000	N	B2	610	23.1	69	111	-0	2604
1364	4500.	S	49.73	87000	N	B2	610	23.1	69	111	-0	2412
1365	3500.	S	50.00	5000	S	B2	500	23.8	72	96	-0	2501
1366	5500.	S	21.65	1900	S	B2	650	23.8	72	96	-0	2302
1367	4000.	S	14.56	710000	N	B2	760	23.8	72	96	-0	2406
1368	5500.	S	5.73	710000	N	B2	760	23.8	72	96	-0	2508
1369	5500.	S	16.70	20000	N	B2	491	23.1	69	111	-0	2508
1370	3500.	S	51.63	13000	S	C3	1043	23.4	75	62	-0	2499
1371	3000.	S	52.65	530000	N	C3	800	23.4	75	62	-0	2601
1372	3500.	S	16.98	530000	N	C3	800	23.4	75	62	-0	2201
1373	5250.	S	35.88	2160	N	B2	940	23.6	75	152	-0	2206
1374	4000.	S	60.36	38500	N	B3	972	23.5	74	287	-0	2604
1375	5250.	S	27.78	11800	N	B2	770	23.4	75	62	-0	2409
1376	4500.	S	8.27	601	N	B3	1300	22.6	74	287	-0	2503
1377	5500.	S	72.55	38800	N	C2	850	23.4	73	123	-0	2302
1378	5500.	S	24.95	4784	N	B2	900	23.4	73	123	-0	2207
1379	4000.	S	41.83	14989	S	C3	1050	23.4	75	62	-0	2405
1380	5500.	S	37.75	127500	N	B2	951	23.4	73	123	-0	2207
1381	4000.	S	33.56	275000	N	A2	1305	23.1	72	175	-0	2502
1382	5250.	S	104.17	275000	N	A2	1305	23.1	72	175	-0	2206
1383	5250.	S	18.08	275000	N	A2	1305	23.1	72	175	-0	2505
1384	4500.	S	73.60	4701	N	B2	1700	23.1	72	175	-0	2204
1385	3000.	S	16.07	203	N	B2	1400	21.6	71	78	-0	2402
1386	4500.	S	23.67	5079	N	B3	3380	18.7	70	109	-0	2204
1387	3500.	S	65.17	5079	N	B3	3380	18.7	70	109	-0	2201
1388	5250.	S	49.57	21500	S	A1	20	26.3	83	312	-0	2609
1389	3500.	S	53.85	15700	N	A1	20	26.6	84	138	-0	2201
1390	3500.	S	63.00	11783	N	A1	30	26.6	84	138	-0	2499
1391	5500.	S	53.22	30700	N	A1	25	26.3	83	312	-0	2207
1392	5250.	S	39.00	78000	N	A1	20	26.6	94	138	-0	2206
1393	5250.	S	222.00	4483	N	A2	204	25.7	77	88	-0	2609
1394	4500.	S	38.81	314	N	A2	275	25.7	77	88	-0	2204
1395	3500.	S	29.13	192000	N	A2	204	25.7	77	88	-0	2501
1396	4000.	S	34.64	192000	N	A2	204	25.7	77	88	-0	2605
1397	5250.	S	29.13	3112	N	B2	250	25.7	77	88	-0	2206
1398	4000.	S	30.23	57389	N	B3	230	25.9	70	40	-0	2405
1399	5500.	S	90.00	35631	N	B2	632	25.9	70	40	-0	2506
1400	5250.	S	47.17	297	N	C4	330	25.9	70	40	-0	2609
1401	5250.	S	41.71	6814	N	D5	389	24.3	74	149	-0	2206
1402	5250.	S	244.00	200	N	D5	443	24.3	74	149	-0	2409
1403	5500.	S	33.29	28500	N	A1	320	26.0	68	61	-0	2207
1404	4500.	S	160.20	7600	N	D5	1371	24.3	74	149	-0	2407
1405	5250.	S	51.36	1612	N	D5	1450	24.3	74	149	-0	2505
1406	4500.	S	49.75	378000	N	B2	1207	23.9	72	122	-0	2503
1407	3500.	S	65.50	23300	N	A2	1389	26.3	65	43	-0	2501
1408	4000.	S	15.02	4638	N	B2	1539	23.9	72	122	-0	2604
1409	4500.	S	64.60	343000	N	B2	744	24.4	78	171	-0	2606
1410	4000.	S	34.47	343000	N	B2	744	24.4	78	171	-0	2604
1411	5500.	S	30.26	15200	N	B2	632	27.2	67	50	-0	2506
1412	5250.	S	23.34	63300	S	B2	491	27.2	67	50	-0	2409
1413	5500.	S	23.27	844401	N	B2	512	27.2	67	50	-0	2302
1414	5500.	S	19.80	844401	N	B2	512	27.2	67	50	-0	2508
1415	4500.	S	52.43	844401	N	B2	512	27.2	67	50	-0	2503
1416	5500.	S	40.94	844401	N	B2	512	27.2	67	50	-0	2506
1417	3500.	S	32.59	844401	N	B2	512	27.2	67	50	-0	2201

1418	4500.	S	45.50	844401	N	B2	512	27.2	67	50	-0	2503
1419	4500.	S	41.71	4196	N	B2	385	25.7	77	88	-0	2412
1420	5500.	S	84.29	23500	N	B2	412	25.7	77	88	-0	2303
1421	5500.	S	45.07	6251	N	A1	228	26.7	77	191	-0	2506
1422	5500.	S	20.08	90032	S	B2	616	27.2	67	50	-0	2506
1423	5500.	S	53.92	90032	N	B2	616	27.2	67	50	-0	2302
1424	4500.	S	20.54	16400	N	B2	764	27.2	67	50	-0	2407
1425	5250.	S	32.45	13300	N	B2	[illegible]	27.2	67	50	-0	2206
1426	4500.	S	41.50	1233535	N	A1	55	26.7	77	191	-0	2204
1427	4500.	S	33.40	1233535	N	A1	55	26.7	77	191	-0	2412
1428	3500.	S	15.09	1233535	N	A1	55	26.7	77	191	-0	2201
1429	5500.	S	13.00	1233535	N	A1	55	26.7	77	191	-0	2302
1430	5250.	S	34.87	1233535	N	A1	55	26.7	77	191	-0	2609
1431	4000.	S	8.15	1233535	N	A1	55	26.7	77	191	-0	2202
1432	5500.	S	14.30	1000	N	A1	55	26.7	77	191	-0	2506
1433	4500.	S	38.25	1681	N	A1	55	26.7	77	191	-0	2407
1434	4500.	S	59.43	73000	S	A1	35	26.7	77	191	-0	2407
1435	3000.	S	65.27	300	N	A1	90	26.7	77	191	-0	2402
1436	4500.	S	23.07	67100	N	A1	18	26.6	82	126	-0	2606
1437	5250.	S	19.61	758000	N	B2	701	26.7	74	117	-0	2206
1438	4000.	S	47.18	758000	N	B2	701	26.7	74	117	-0	2605
1439	4000.	S	21.95	758000	N	B2	701	26.7	74	117	-0	2202
1440	4500.	S	15.46	758000	N	B2	701	26.7	74	117	-0	2204
1441	5000.	S	70.89	758000	N	B2	701	26.7	74	117	-0	2209
1442	5500.	S	23.07	25200	N	A1	66	28.6	77	33	-0	2302
1443	5500.	S	66.13	210000	N	A1	35	28.6	77	33	-0	2302
1444	3500.	S	29.58	50400	N	A1	33	28.1	77	56	-0	2201
1445	5250.	S	8.48	4437	N	B2	292	26.7	74	117	-0	2206
1446	5250.	S	12.23	4719	N	B2	200	26.6	77	180	-0	2206
1447	4500.	S	10.76	307000	N	B2	550	26.6	77	180	-0	2606
1448	4500.	S	45.93	10764	N	B2	913	26.7	74	117	-0	2412
1449	5500.	S	22.05	132000	N	A2	3676	22.9	60	105	-0	2302
1450	5250.	S	11.24	159000	N	A2	3241	25.2	53	46	-0	2206
1451	4000.	S	28.18	93000	N	A2	1738	25.8	63	43	-0	2604
1452	5250.	S	63.31	58900	N	A2	2779	26.8	52	14	-0	2505
1453	3500.	S	119.60	35000	N	B3	2397	26.8	52	14	-0	2499
1454	5500.	S	20.07	76000	N	A2	2890	26.8	52	14	-0	2506
1455	3000.	S	36.00	18800	S	B2	5300	17.9	50	54	-0	2402
1456	4500.	S	124.33	51000	S	B2	5450	17.9	50	54	-0	2608
1457	4000.	S	23.44	50000	N	D6	5360	17.9	50	54	-0	2202
1458	4500.	S	15.50	3148	N	B3	3893	21.1	47	52	-0	2503
1459	4500.	S	59.16	25200	N	B4	4596	19.7	33	11	-0	2503
1460	5250.	S	95.14	874	N	B4	4720	19.7	33	11	-0	2206
1461	5250.	S	20.61	5806	N	D6	4061	14.7	63	116	-0	2206
1462	5250.	S	92.25	11500	N	D6	3745	14.7	63	116	-0	2609
1463	3500.	S	13.81	13783	N	C5	2583	17.6	45	33	-0	2499
1464	3500.	S	51.83	22500	N	B6	4372	18.2	47	46	-0	2201
1465	4500.	S	15.19	172000	N	B6	4260	18.2	47	46	-0	2412
1466	5500.	S	74.11	54504	N	B5	1250	30.3	16	0	-0	2207
1467	5500.	S	13.18	23500	S	B5	1135	30.3	16	0	-0	2506
1468	4500.	S	28.25	290000	N	B6	4958	22.9	24	0	-0	2503
1469	3500.	S	52.57	6028	N	B4	6436	22.8	24	0	-0	2201
1470	5500.	S	47.50	27000	N	B2	3100	24.8	43	14	-0	2506
1471	5500.	S	23.21	3039	N	B6	4320	16.9	39	5	-0	2303
1472	5500.	S	45.24	84000	N	B6	4498	16.9	39	5	-0	2302
1473	5500.	S	15.00	2750000	N	B4	287	18.1	80	1	-0	2302
1474	4500.	S	27.29	2750000	N	B4	287	18.1	90	1	-0	2407

1475	3500.	S	38.13	2750000	N	B4	287	18.1	80	1	-0	2201
1476	4000.	S	40.89	2750000	N	B4	287	18.1	80	1	-0	2502
1477	5500.	S	47.71	69000	S	B4	66	18.1	80	0	-0	2207
1478	4000.	S	14.02	55400	S	B4	75	18.1	80	0	-0	2202
1479	4000.	S	25.25	54400	S	B4	47	18.1	80	0	-0	2605
1480	4500.	S	10.09	54400	N	B4	47	18.1	80	1	-0	2407
1481	4000.	S	47.82	-0	S	B4	287	19.3	73	0	-0	2502
1482	4000.	S	74.31	6000	N	D6	13500	18.1	80	0	-0	2405
1483	4500.	S	32.44	-0	S	C5	287	18.1	80	0	-0	2606
1484	3000.	S	38.39	7700	S	C5	287	18.1	80	0	-0	2402
1485	4000.	S	41.90	-0	S	C5	287	18.1	80	0	-0	2604
1486	3500.	S	65.00	24000	N	C5	720	18.1	80	0	-0	2501
1487	5500.	S	54.73	50700	S	B4	493	18.1	80	0	-0	2302
1488	3500.	S	25.42	20000	N	B3	39	18.3	71	0	-0	2499
1489	3500.	S	79.88	755000	N	B3	42	18.3	71	0	-0	2501
1490	3500.	S	23.65	755000	N	B3	42	18.3	71	1	-0	2499
1491	5500.	S	53.17	27000	N	B5	420	18.1	80	0	-0	2302
1492	3000.	S	13.35	20000	N	B5	975	18.1	80	0	-0	2601
1493	5250.	S	13.50	23900	N	B5	1275	18.1	80	0	-0	2206
1494	3500.	S	21.44	4372	N	C5	520	18.1	80	0	-0	2499
1495	3250.	S	35.17	80600	N	C5	50	18.1	80	0	-0	2409
1496	3000.	S	20.30	90500	N	C5	50	18.1	80	0	-0	2601
1497	3500.	S	44.00	13900	N	A1	459	27.3	33	0	-0	2201
1498	4500.	S	70.90	13200	N	A1	290	27.3	33	0	-0	2608
1499	3000.	S	27.97	77500	N	A1	406	27.3	33	0	-0	2601
1500	4000.	S	14.10	7000	N	D6	2220	27.3	33	0	-0	2502
1501	5500.	S	427.00	3747	N	A1	294	23.7	43	0	-0	2207
1502	5500.	S	33.11	175500	S	A1	294	23.7	43	0	-0	2303
1503	4000.	S	31.44	55100	S	C5	50	16.2	76	2	-0	2605
1504	4500.	S	40.17	8085	N	C5	50	15.4	70	1	-0	2407
1505	5500.	S	55.42	45976	N	C5	130	15.4	70	1	-0	2303
1506	4500.	S	60.00	12100	N	C5	23	16.2	76	2	-0	2608
1507	5500.	S	24.00	107400	N	C5	152	16.2	76	2	-0	2207
1508	4000.	S	14.44	107400	N	C5	152	16.2	76	2	-0	2405
1509	5500.	S	16.79	16300	N	C5	384	15.4	70	1	-0	2303
1510	4000.	S	19.32	94800	N	C5	35	15.4	70	1	-0	2202
1511	5500.	S	44.00	84500	N	C5	85	15.4	70	1	-0	2303
1512	5500.	S	50.57	315000	N	C5	65	15.4	70	1	-0	2302
1513	3500.	S	42.76	535000	N	C5	65	15.4	70	1	-0	2201
1514	3000.	S	52.36	535000	N	C5	65	15.4	70	1	-0	2402
1515	4000.	S	74.36	535000	N	C5	65	15.4	70	1	-0	2202
1516	4000.	S	32.47	500	N	D5	3967	21.2	33	2	-0	2502
1517	4000.	S	43.00	21500	N	B2	160	22.9	51	1	-0	2405
1518	5500.	S	31.63	265000	N	A1	25	22.9	51	1	-0	2303
1519	4500.	S	31.90	4824	N	B3	60	16.6	63	29	-0	2204
1520	4500.	S	15.47	1903	N	B3	796	16.6	63	29	-0	2606
1521	4000.	S	433.00	2322	N	D6	459	16.6	75	22	-0	2502
1522	4000.	S	47.50	13100	N	D6	4105	17.7	49	10	-0	2604
1523	3500.	S	25.50	20800	N	B3	66	15.9	65	21	-0	2609
1524	3000.	S	36.50	13100	N	B3	440	15.9	65	21	-0	2402
1525	3250.	S	22.59	490000	N	B3	125	15.9	65	21	-0	2501
1526	3000.	S	31.45	8100	N	B3	31	15.9	65	21	-0	2601
1527	4500.	S	42.90	145000	N	B3	250	15.9	65	21	-0	2606
1528	4500.	S	15.14	25800	N	B3	100	14.2	69	18	-0	2407
1529	4000.	S	65.50	26800	N	C3	21	16.6	63	29	-0	2604
1530	3500.	S	30.66	913	N	D6	727	15.9	65	21	-0	2501
1531	4500.	S	13.97	153000	N	B3	1000	15.1	54	37	-0	2412
1532	5500.	S	20.45	15300	N	B2	380	18.2	54	12	-0	2506

APPENDIX B

FUEL ECONOMY SCATTER PLOTS

APPENDIX B

FUEL ECONOMY SCATTER PLOTS

This appendix contains 192 scatter plots that illustrate the variation between fuel economy (mpg) and each of eight parameters (population, zip code, terrain index, elevation, relative humidity, precipitation, temperature, and average miles per day) for 24 carline classes that contain at least 20 cars. These carline classes have the following parameters in common: Division (of General Motors), Inertia Weight, CID and BBL, Transmission Type, and Axle Ratio. (Refer to Table 2-5 for an explanation of the class code.) Also displayed on each plot is a correlation coefficient and a 95-percent confidence interval for that correlation coefficient.

For each class of cars, the first plot shows mpg versus population of the city in which the driver resides. Because of the large range in population associated with this study, those cities with populations greater than or equal to 100,000 are shown plotted as cities with exactly 100,000 people. Actual populations were, of course, used in the computation of the correlation coefficients and confidence intervals.

The second plot shows mpg versus the first digit of the zip code of the driver's address. (The zip code scale includes "10" due to an idiosyncrasy in the plotting subroutine used.)

The third plot for each class of cars shows mpg versus the terrain index. Actually, only that portion of the terrain index was used that corresponds to the local slope of the city in which the driver resides. (Refer to Section 2 for a more detailed discussion of this factor.)

The fourth plot shows mpg versus the average elevation above sea level of the city in which the driver resides. Elevations greater than or equal to 5000 feet are shown plotted at 5000 feet. Actual elevations were used in the computation of the correlation coefficients and confidence intervals.

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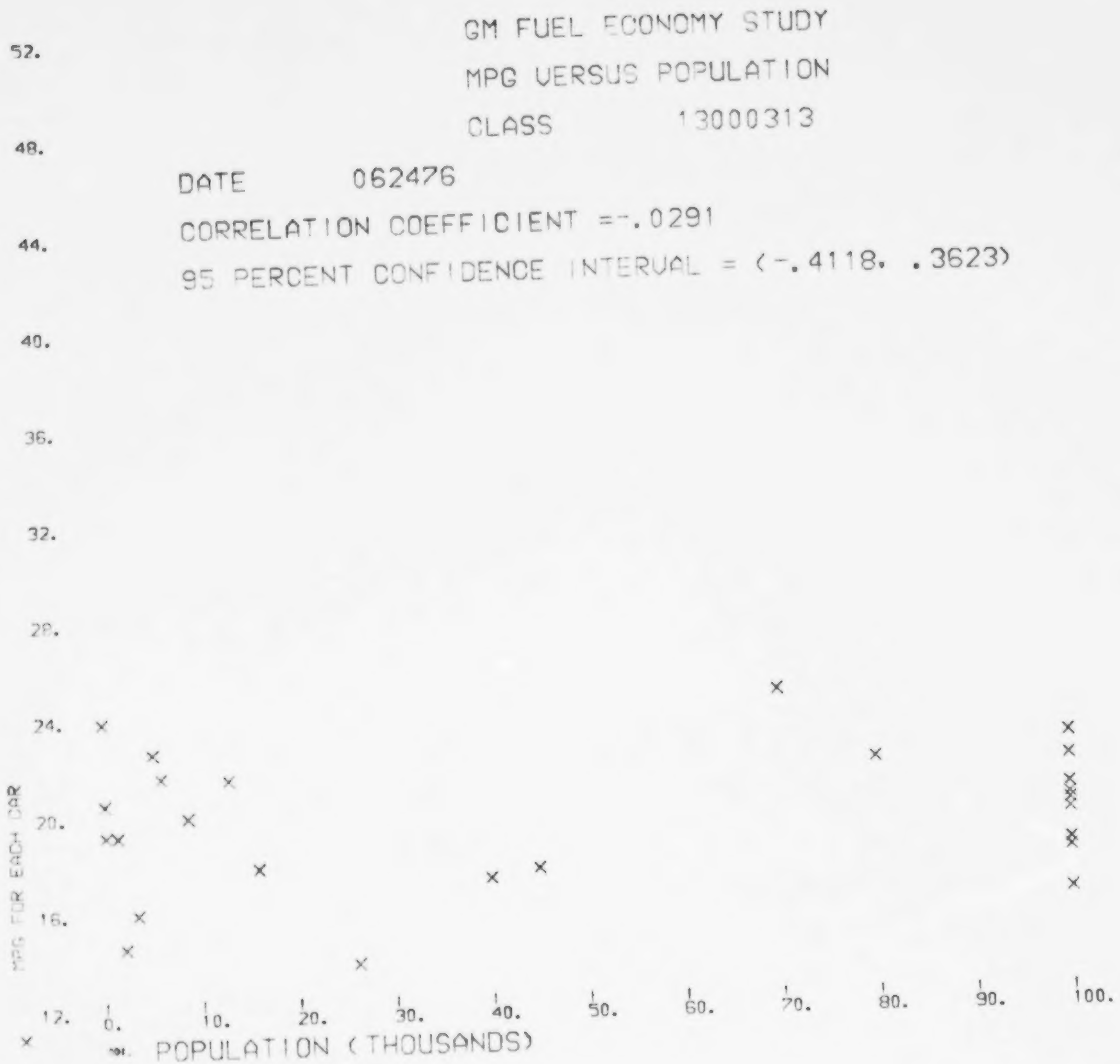
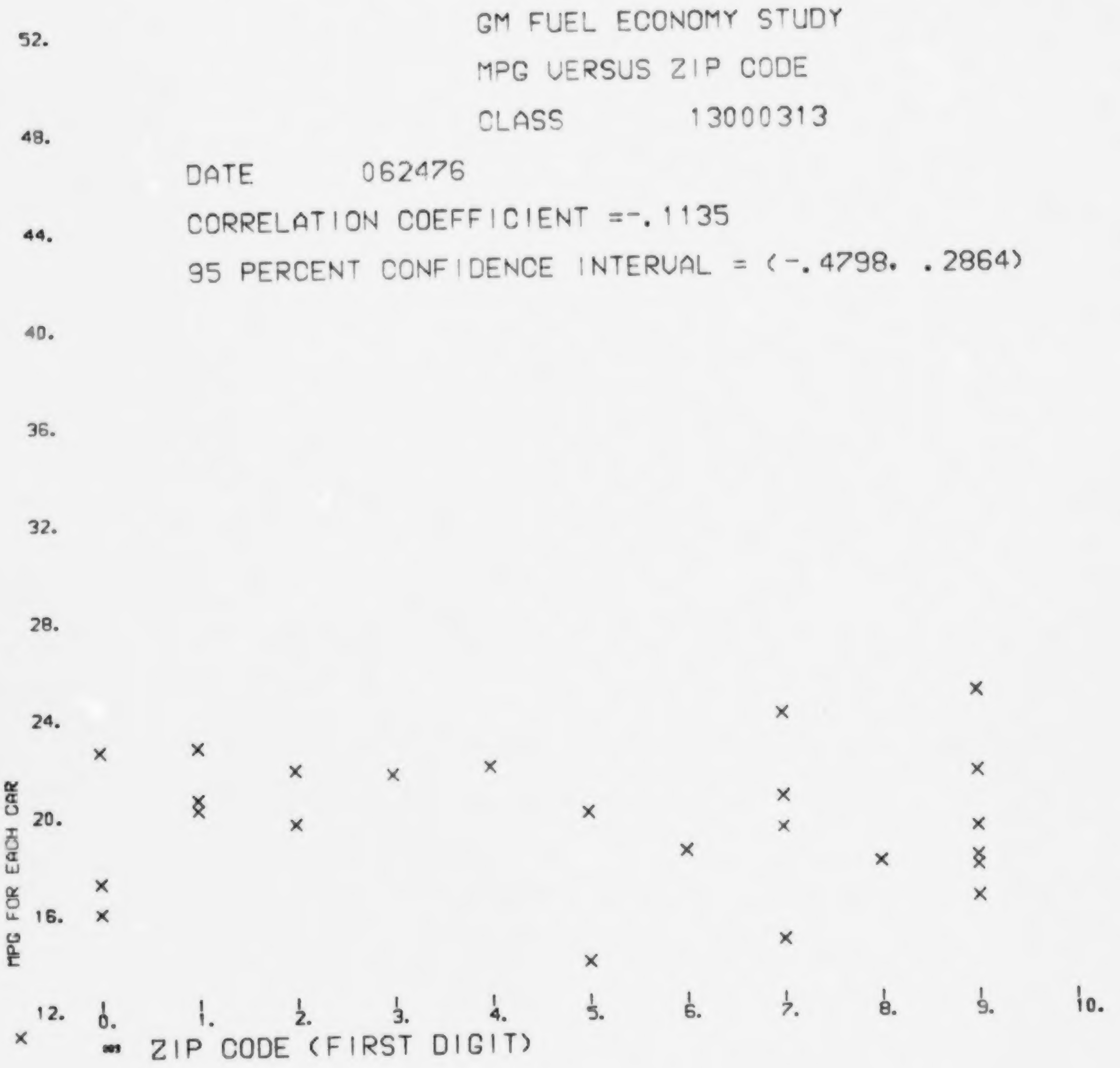
The fifth, sixth, and seventh plots for each class of cars show mpg versus relative humidity, precipitation, and temperature respectively. These weather data correspond to averages over the months of December 1974 or June 1975 depending on whether the fuel economy data were acquired from the low mileage winter survey or the low mileage spring-summer survey. (Refer to Section 2 for further discussion of this factor.)

The eighth and final plot shows mpg versus miles per day averaged over the duration of the test.



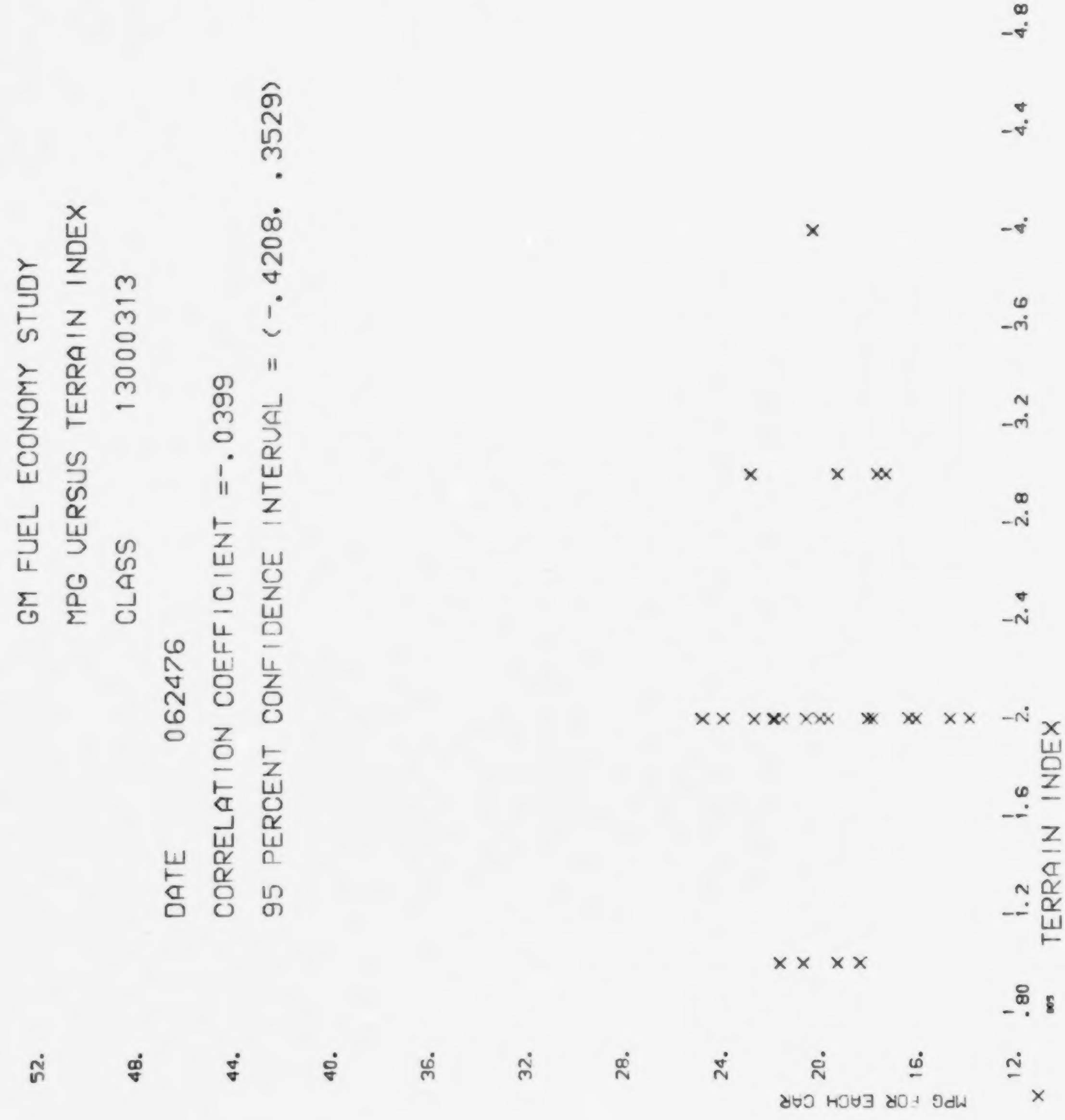
GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 13000313

DATE 062476
CORRELATION COEFFICIENT =-.0291
95 PERCENT CONFIDENCE INTERVAL = (-.4118, .3623)



GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 13000313

DATE 062476
CORRELATION COEFFICIENT =-.1135
95 PERCENT CONFIDENCE INTERVAL = (-.4798. .2864)



GM FUEL ECONOMY STUDY

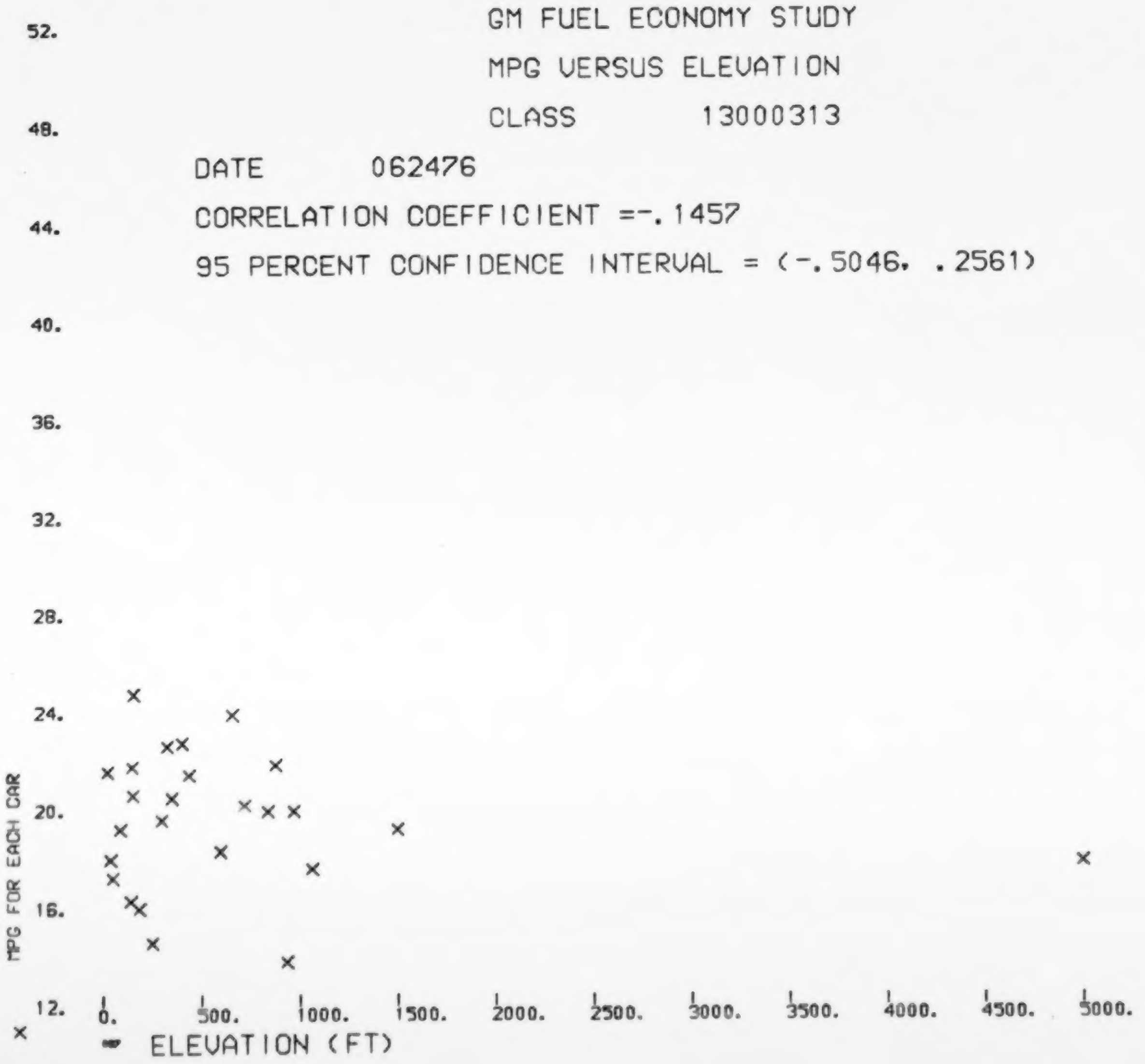
MPG VERSUS TERRAIN INDEX

CLASS 13000313

DATE 062476

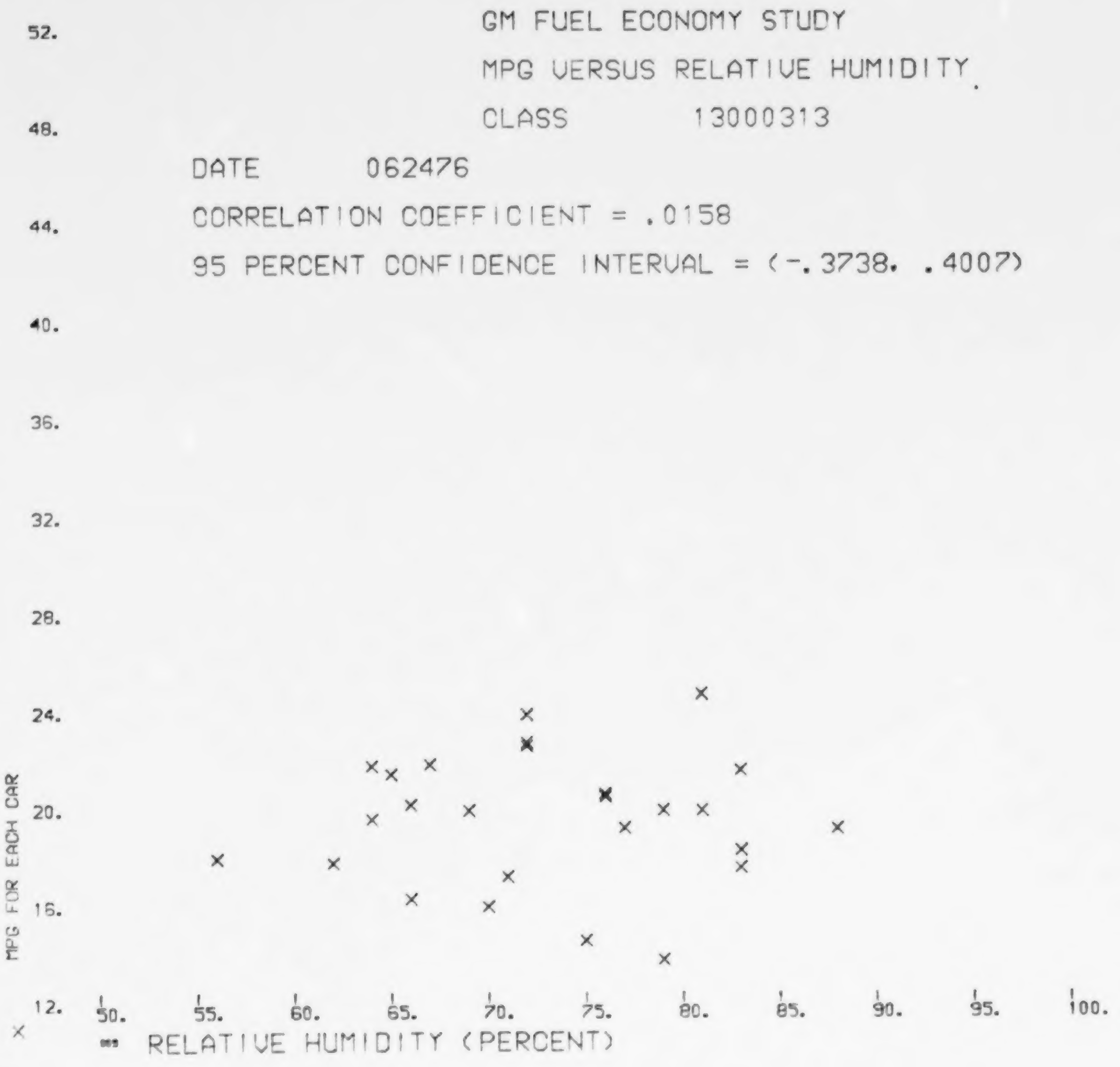
CORRELATION COEFFICIENT =-.0399

95 PERCENT CONFIDENCE INTERVAL = (-.4208, .3529)



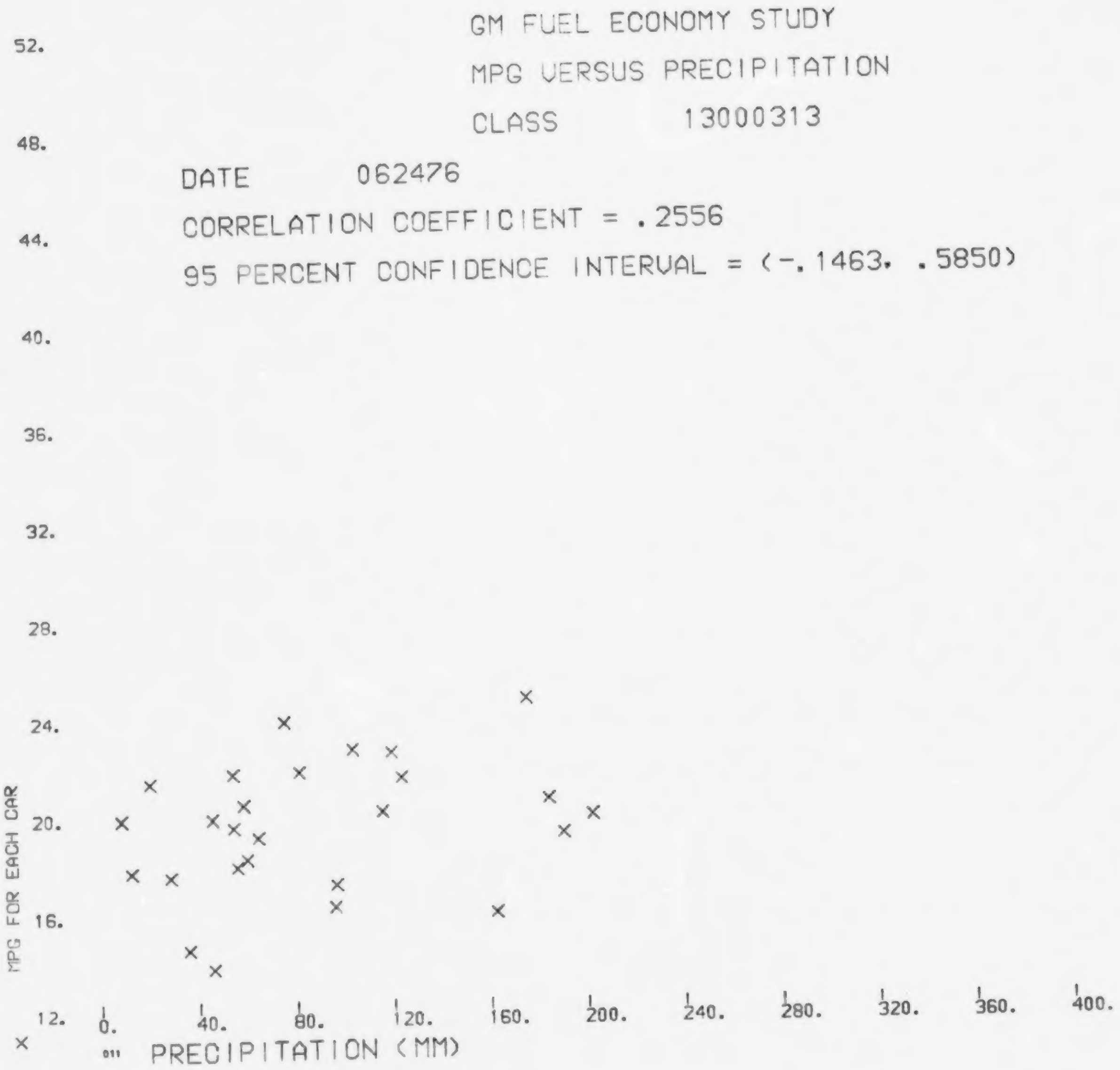
GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 13000313

DATE 062476
CORRELATION COEFFICIENT =-.1457
95 PERCENT CONFIDENCE INTERVAL = (-.5046, .2561)



GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 13000313

DATE 062476
CORRELATION COEFFICIENT = .0158
95 PERCENT CONFIDENCE INTERVAL = (-.3738. .4007)



GM FUEL ECONOMY STUDY

MPG VERSUS PRECIPITATION

CLASS 13000313

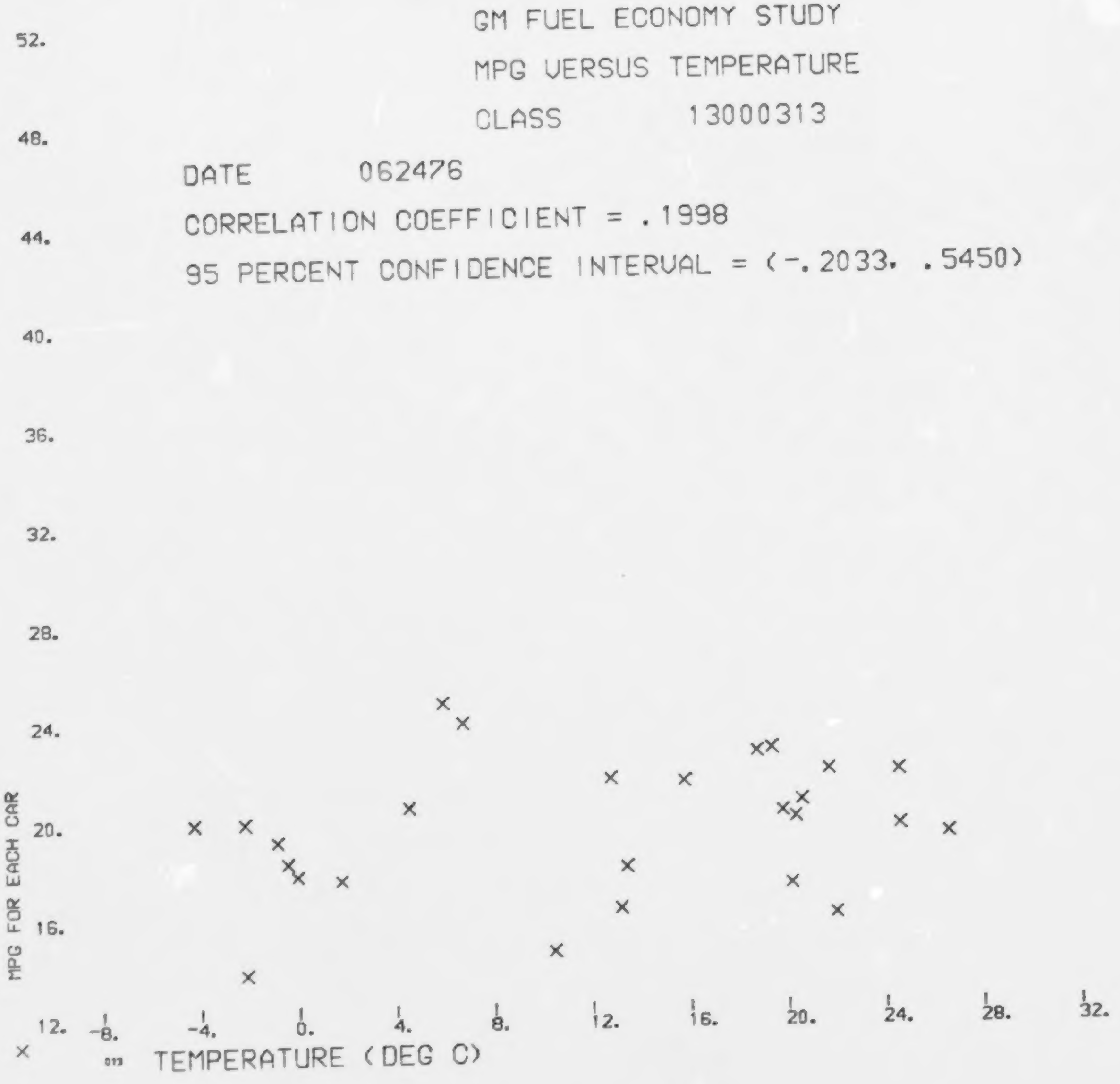
DATE 062476

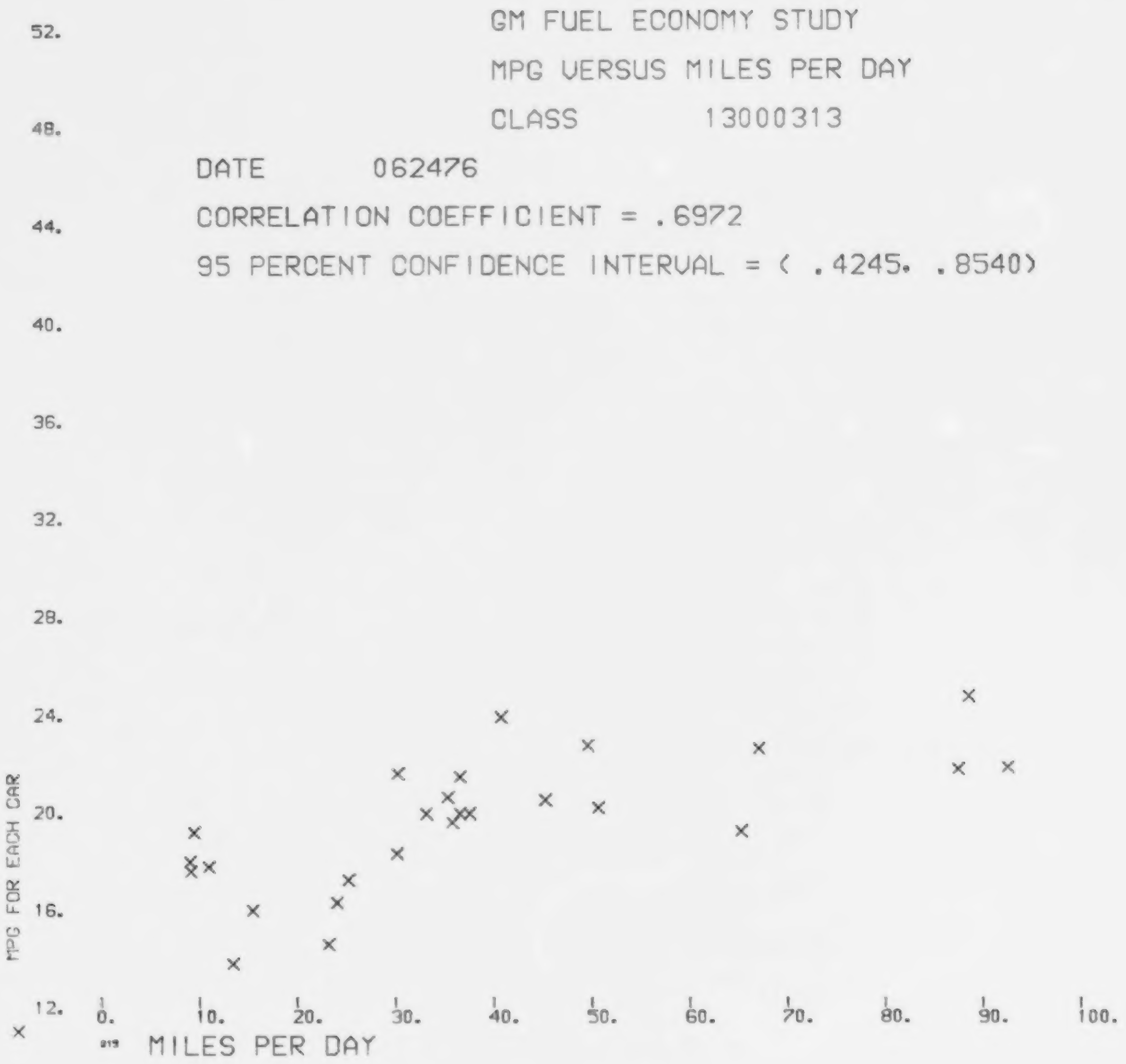
CORRELATION COEFFICIENT = .2556

95 PERCENT CONFIDENCE INTERVAL = (-.1463, .5850)

GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 13000313

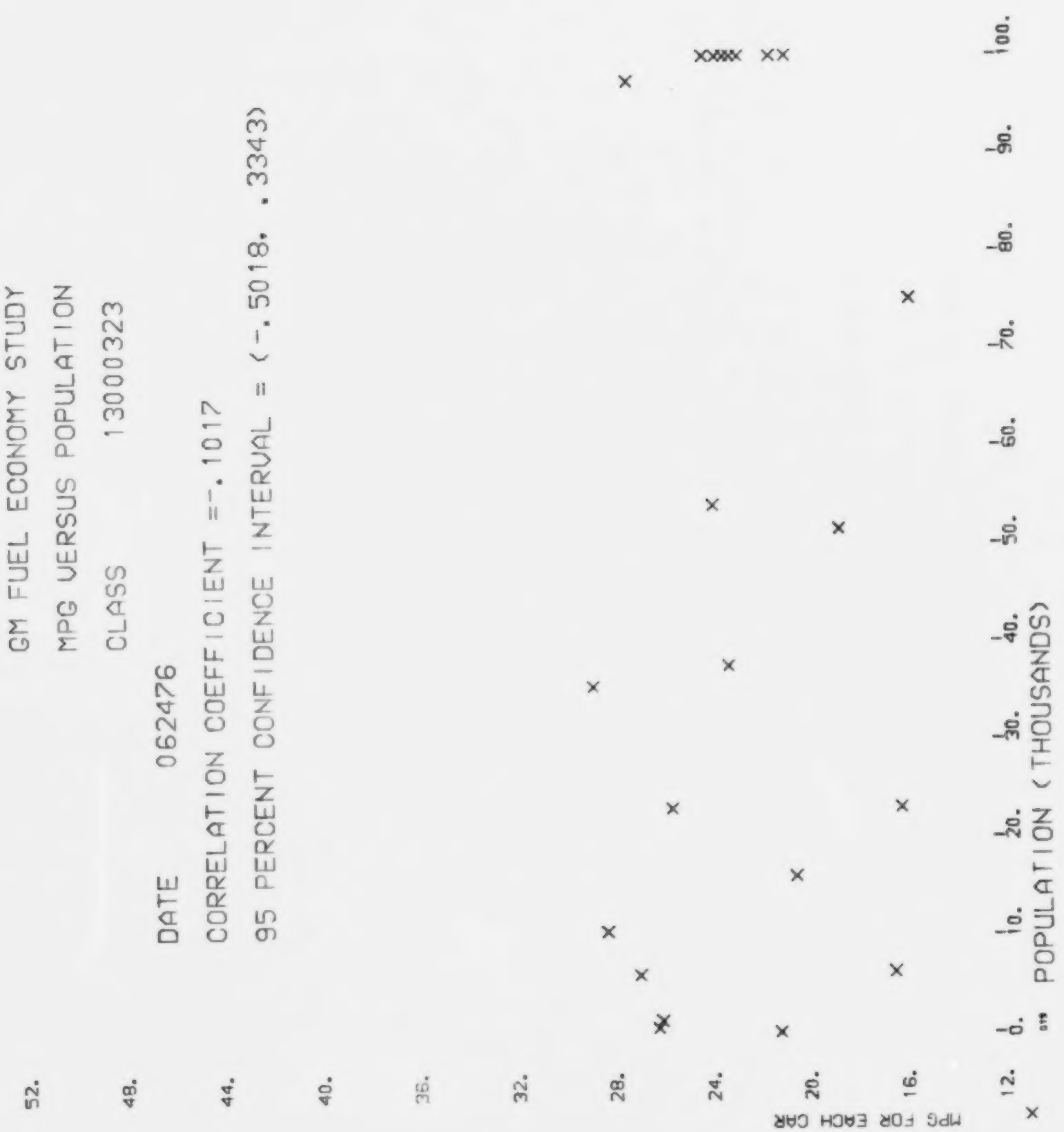
DATE 062476
CORRELATION COEFFICIENT = .1998
95 PERCENT CONFIDENCE INTERVAL = (-.2033. .5450)





GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 13000313

DATE 062476
CORRELATION COEFFICIENT = .6972
95 PERCENT CONFIDENCE INTERVAL = (.4245. .8540)



GM FUEL ECONOMY STUDY

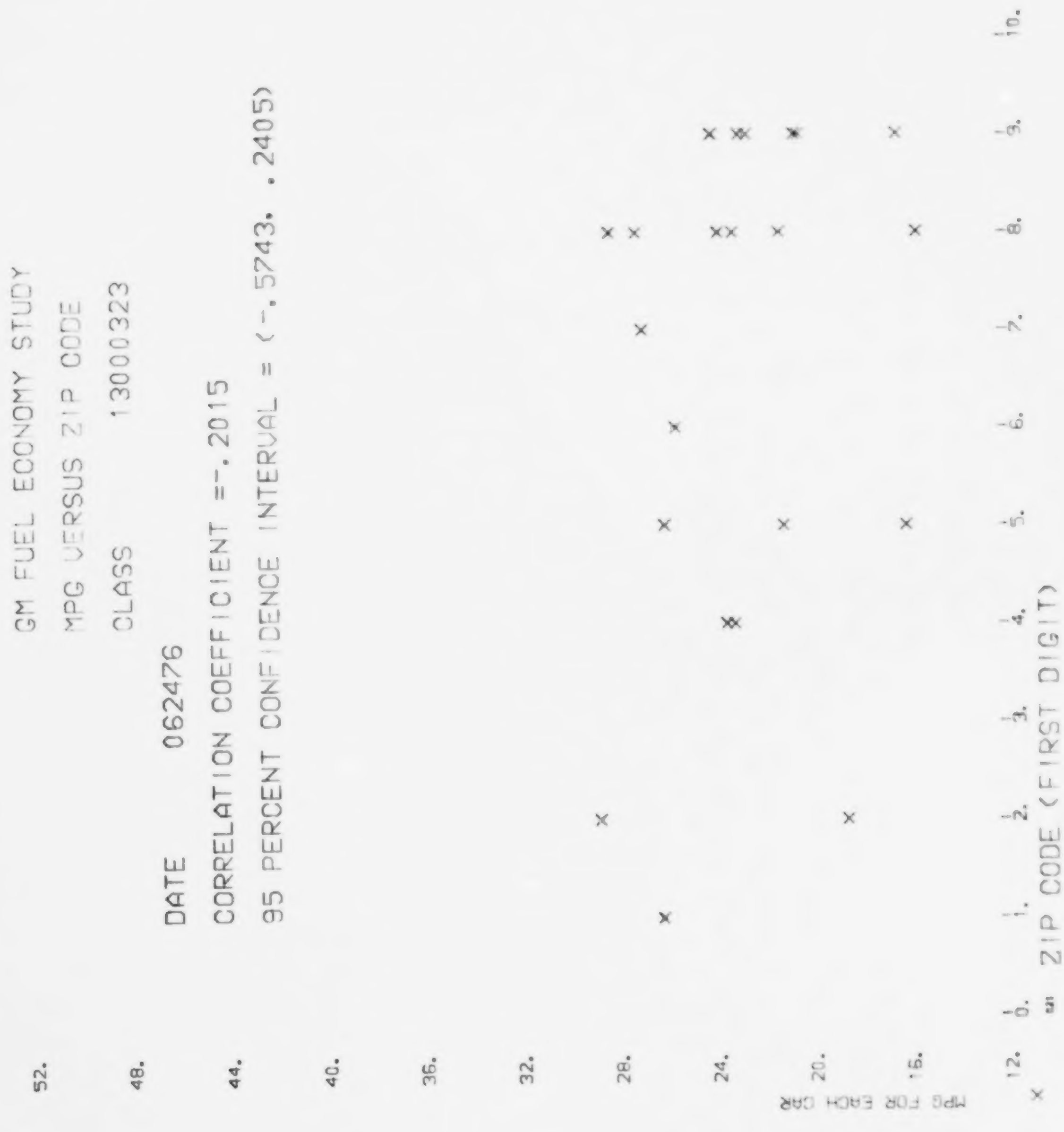
MPG VERSUS POPULATION

CLASS 13000323

DATE 062476

CORRELATION COEFFICIENT =-.1017

95 PERCENT CONFIDENCE INTERVAL = (-.5018, .3343)



GM FUEL ECONOMY STUDY

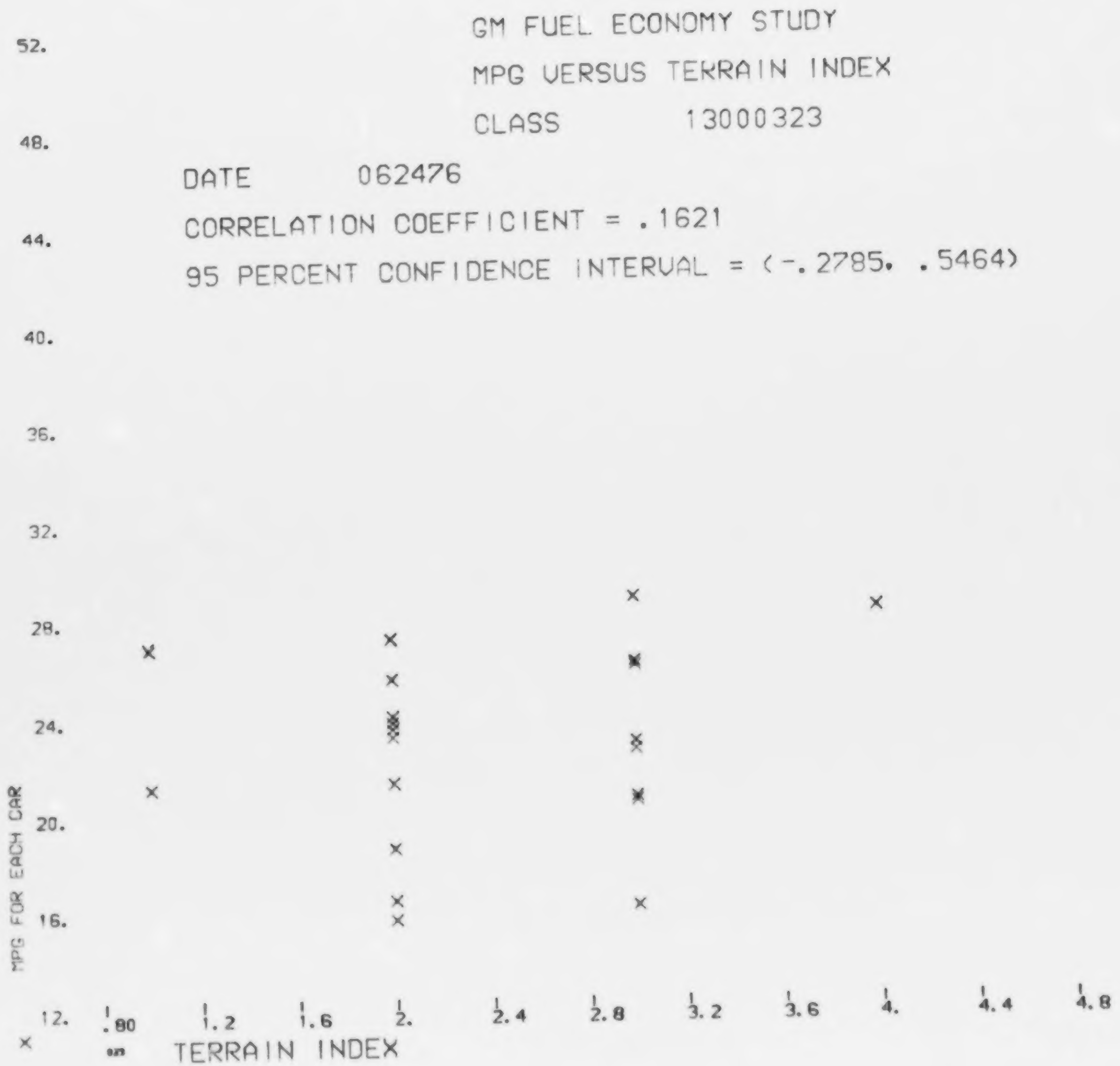
MPG VERSUS ZIP CODE

CLASS 13000323

DATE 062476

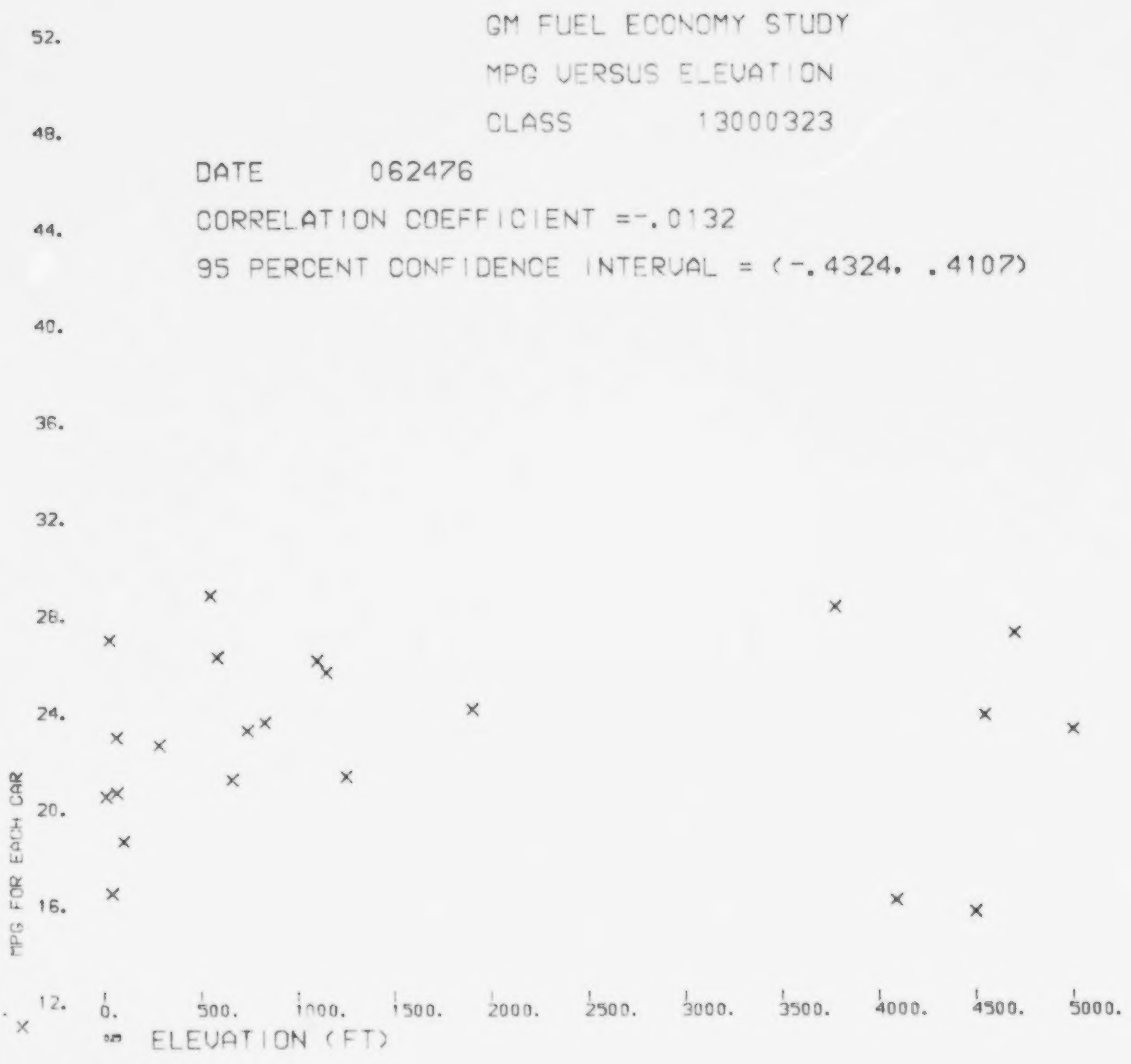
CORRELATION COEFFICIENT =-.2015

95 PERCENT CONFIDENCE INTERVAL = (-.5743, .2405)



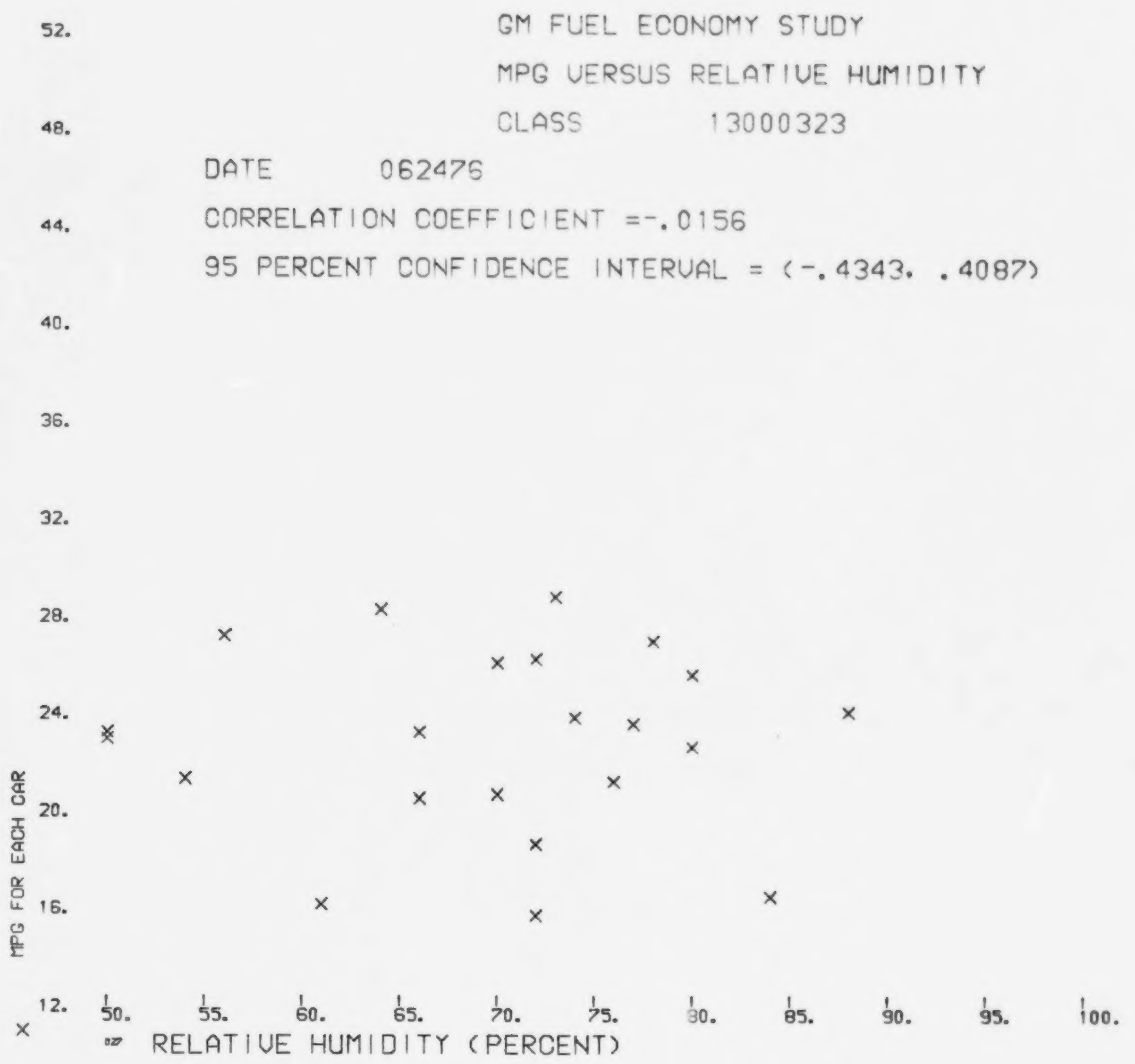
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 13000323

DATE 062476
CORRELATION COEFFICIENT = .1621
95 PERCENT CONFIDENCE INTERVAL = (-.2785, .5464)



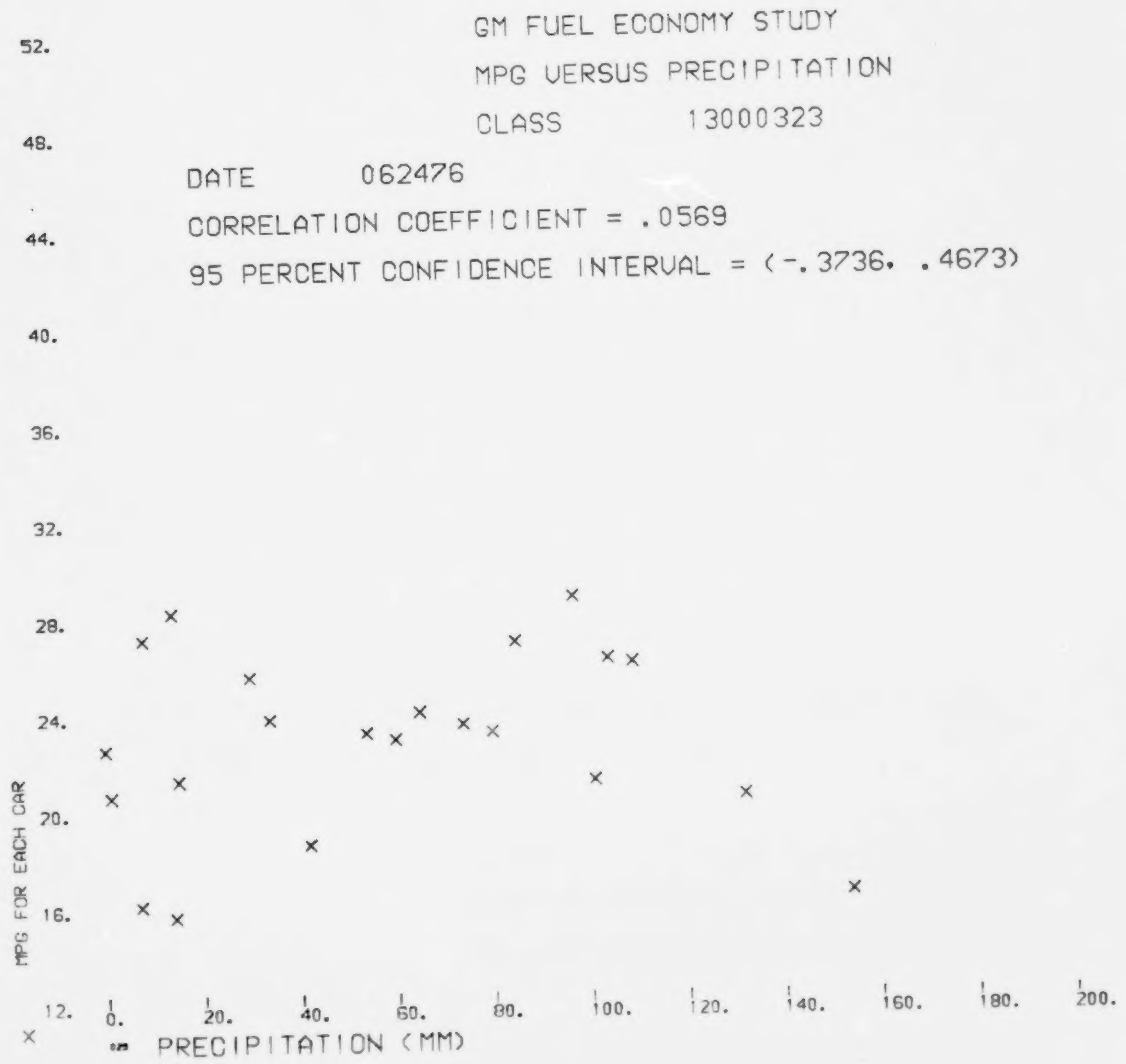
GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 13000323

DATE 062476
CORRELATION COEFFICIENT =-.0132
95 PERCENT CONFIDENCE INTERVAL = (-.4324, .4107)



GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 13000323

DATE 062476
CORRELATION COEFFICIENT =-.0156
95 PERCENT CONFIDENCE INTERVAL = (-.4343. .4087)



GM FUEL ECONOMY STUDY

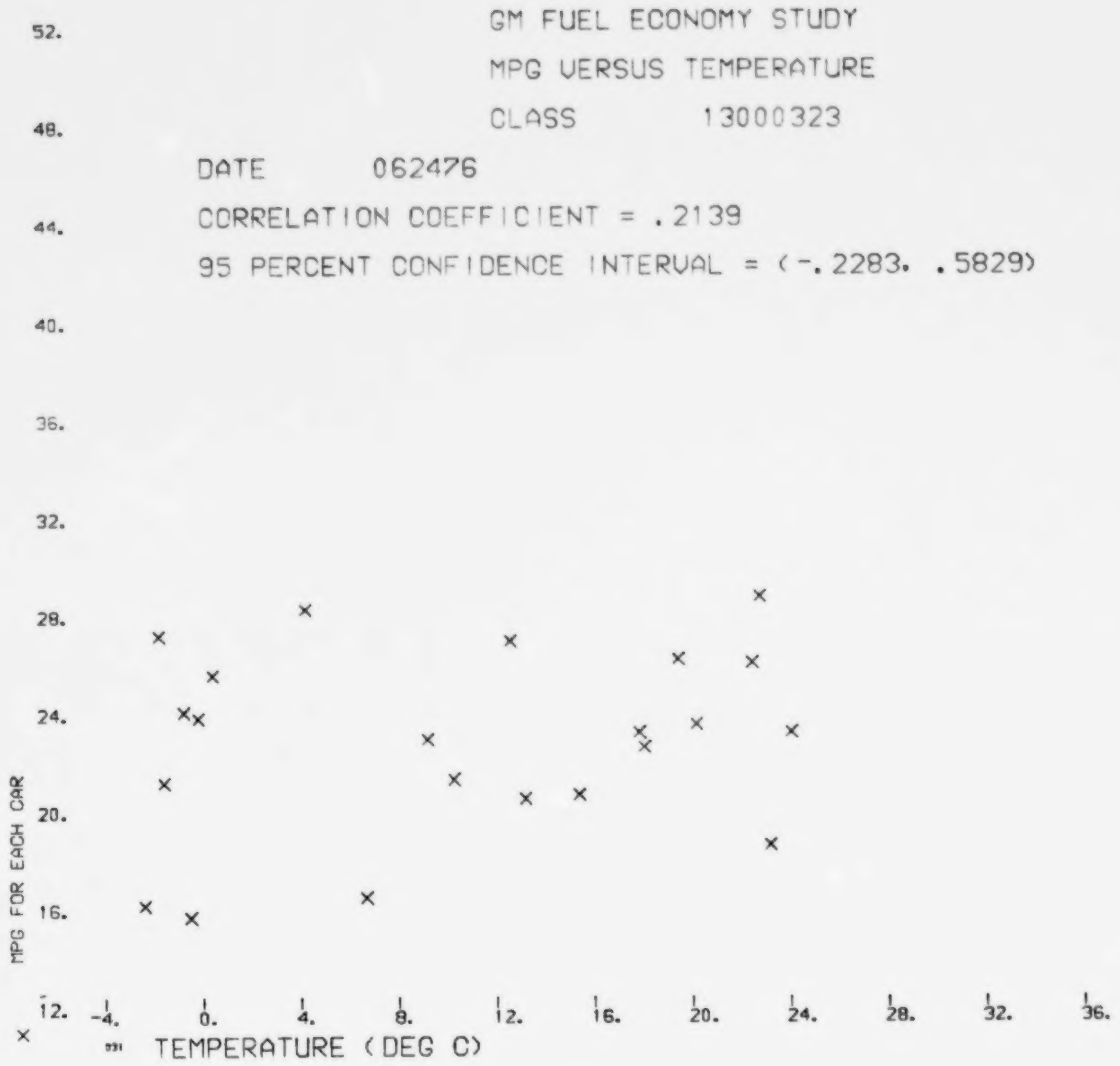
MPG VERSUS PRECIPITATION

CLASS 13000323

DATE 062476

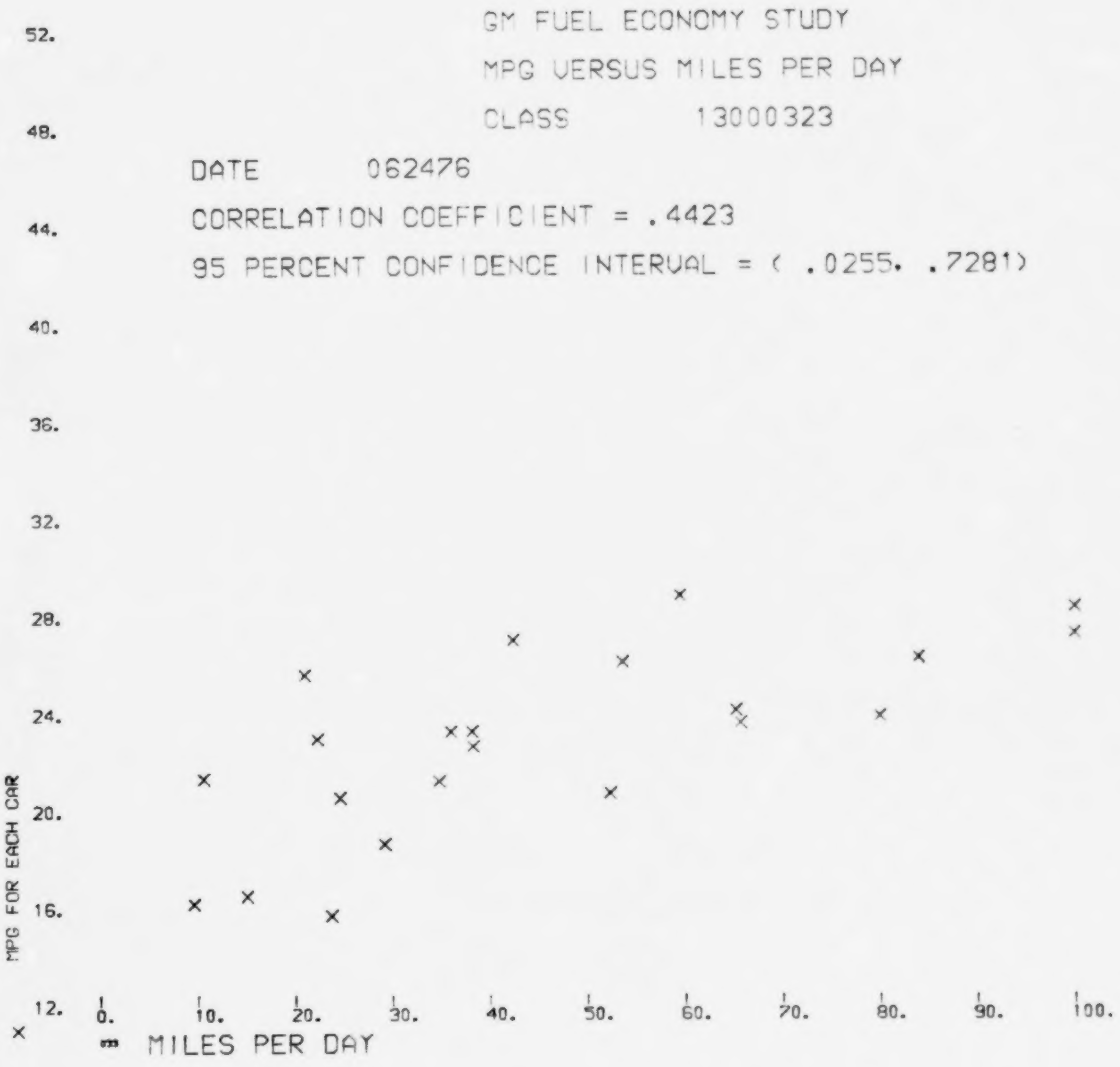
CORRELATION COEFFICIENT = .0569

95 PERCENT CONFIDENCE INTERVAL = (-.3736. .4673)



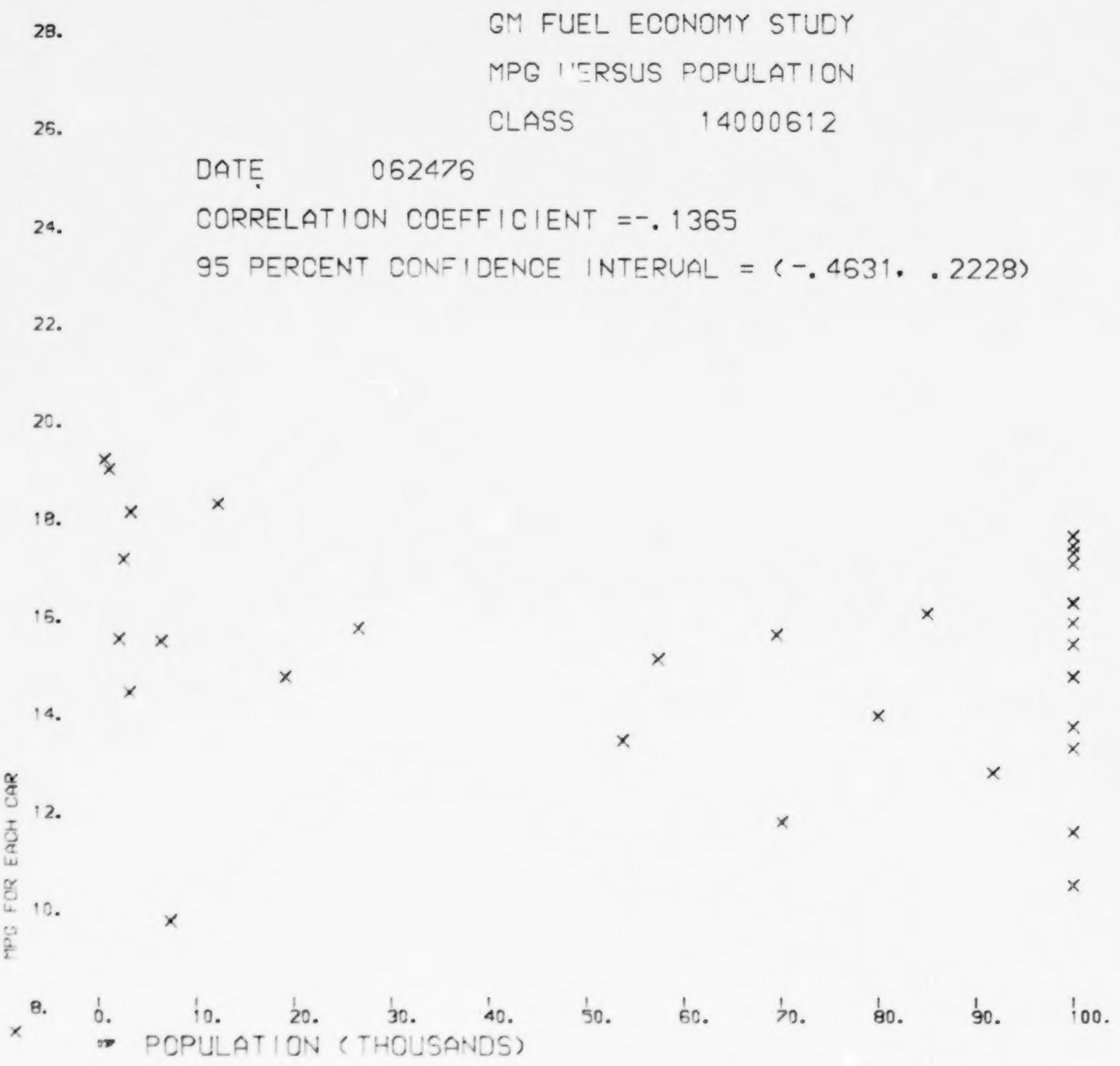
GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 13000323

DATE 062476
CORRELATION COEFFICIENT = .2139
95 PERCENT CONFIDENCE INTERVAL = (-.2283. .5829)



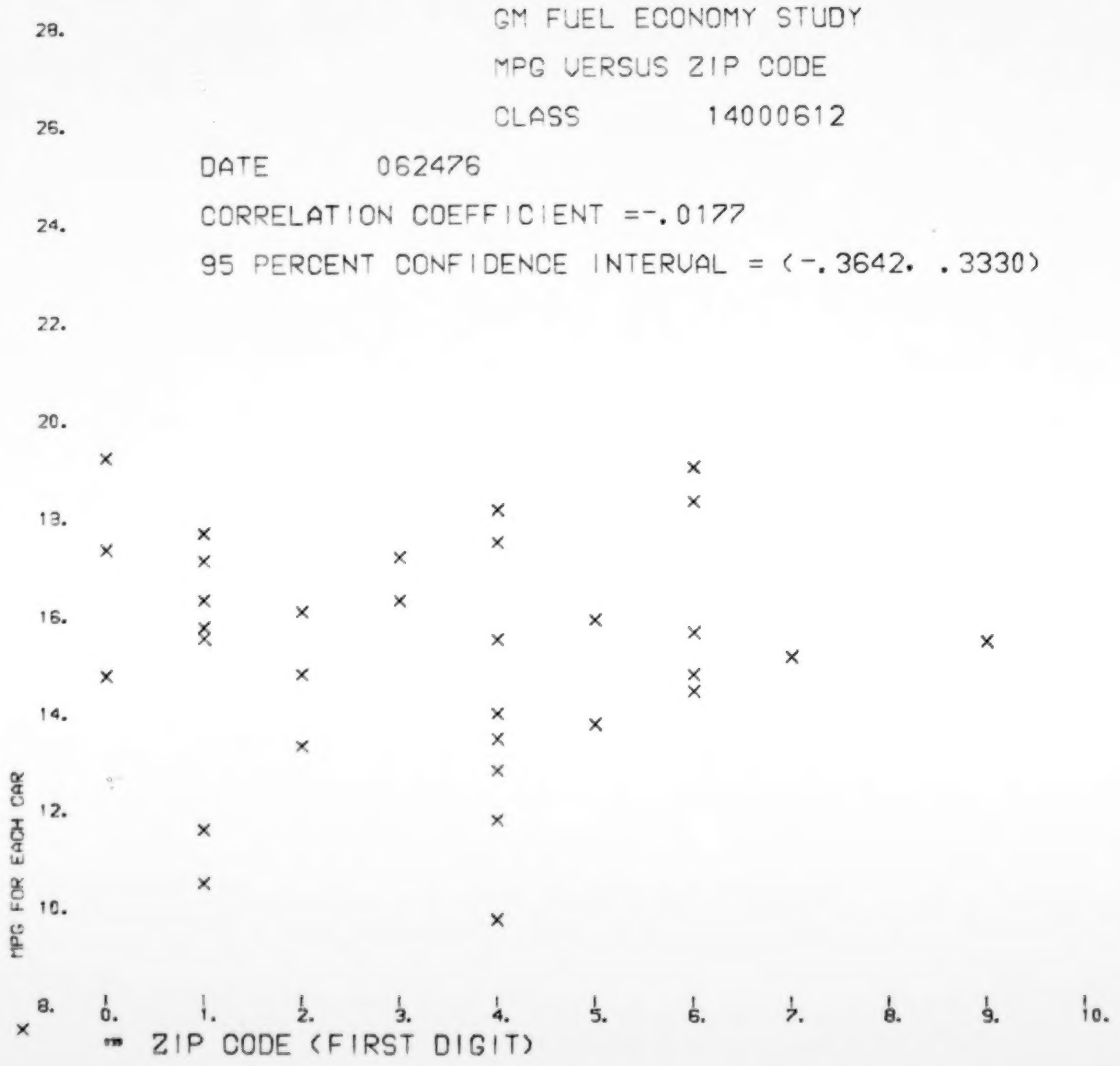
GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 13000323

DATE 062476
CORRELATION COEFFICIENT = .4423
95 PERCENT CONFIDENCE INTERVAL = (.0255. .7281)



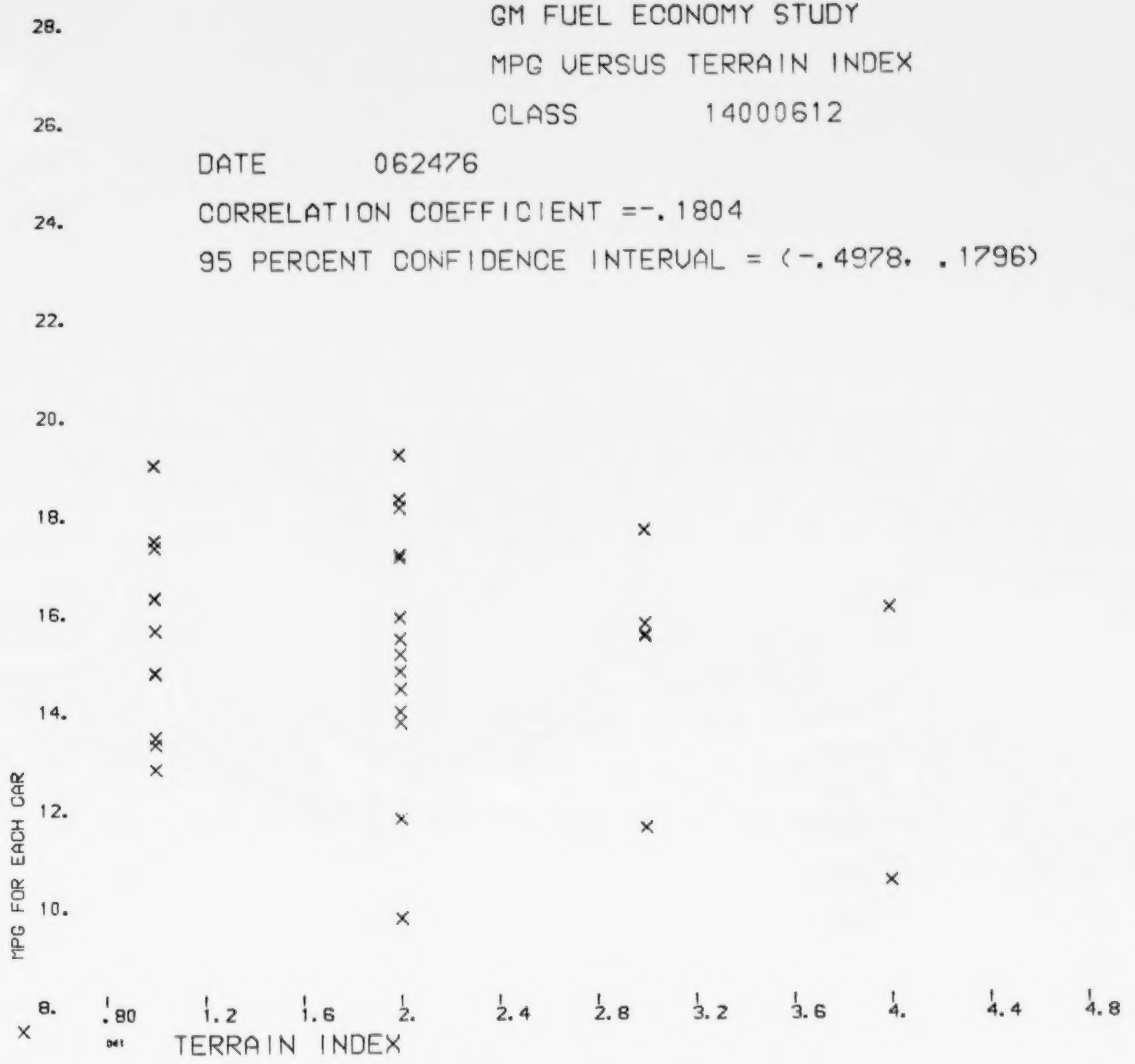
GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 14000612

DATE 062476
CORRELATION COEFFICIENT =-.1365
95 PERCENT CONFIDENCE INTERVAL = (-.4631. .2228)

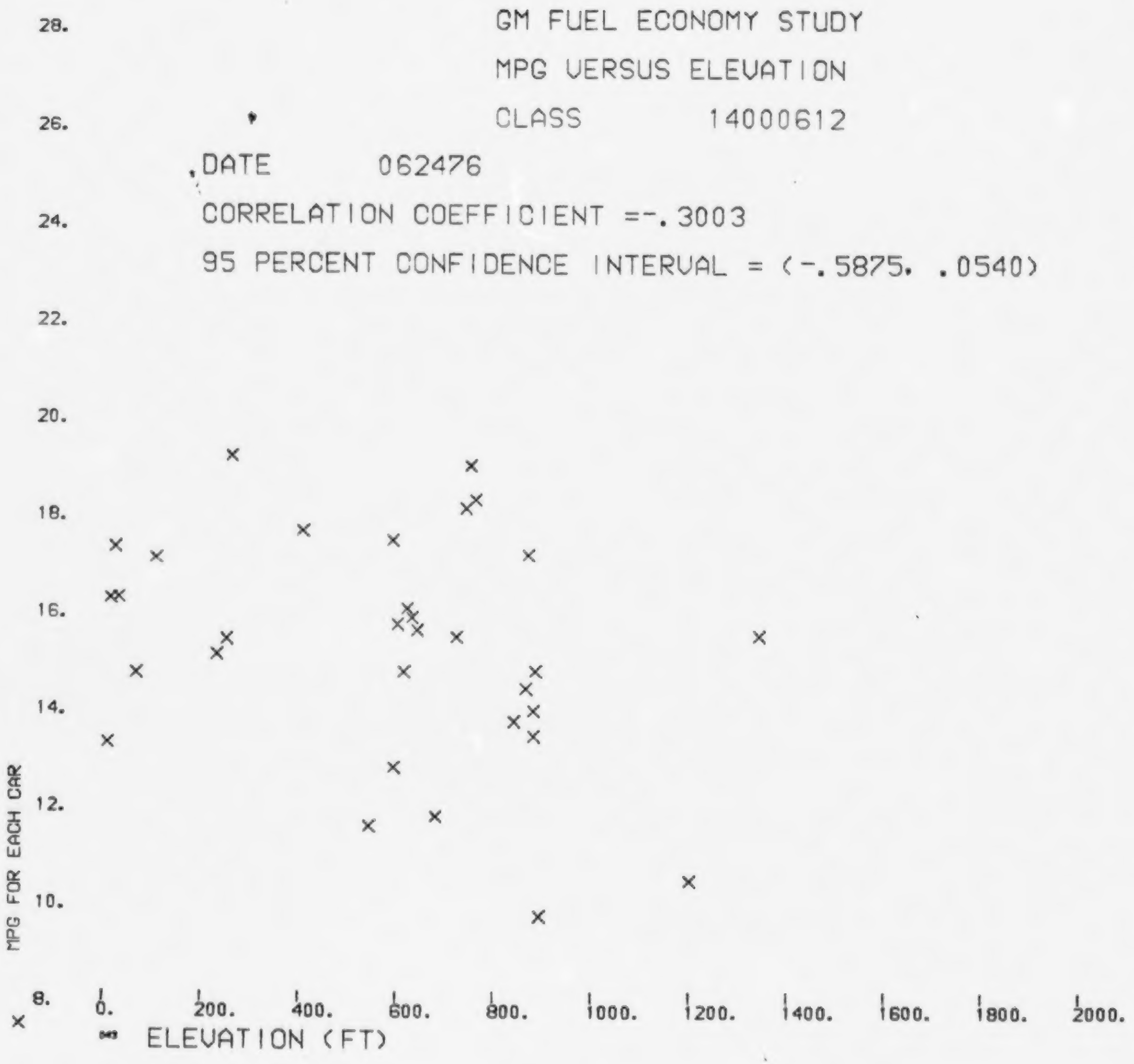


GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 14000612

DATE 062476
CORRELATION COEFFICIENT =-.0177
95 PERCENT CONFIDENCE INTERVAL = (-.3642. .3330)



GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 14000612
DATE 062476
CORRELATION COEFFICIENT =-.1804
95 PERCENT CONFIDENCE INTERVAL = (-.4978, .1796)



GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 14000612
DATE 062476
CORRELATION COEFFICIENT =-.3003
95 PERCENT CONFIDENCE INTERVAL = (-.5875. .0540)

GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 14000612

DATE 062476
CORRELATION COEFFICIENT =-.1078
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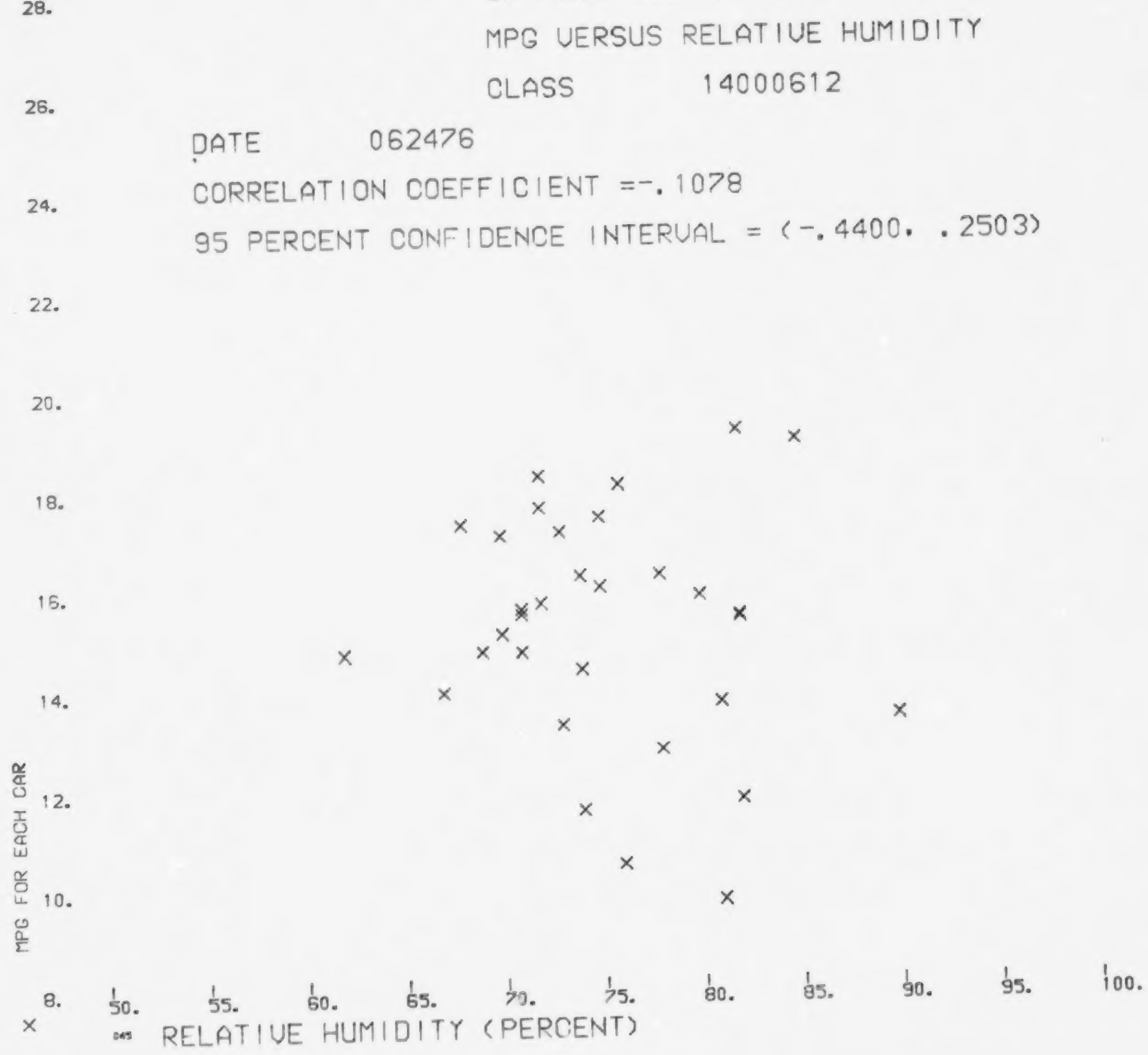
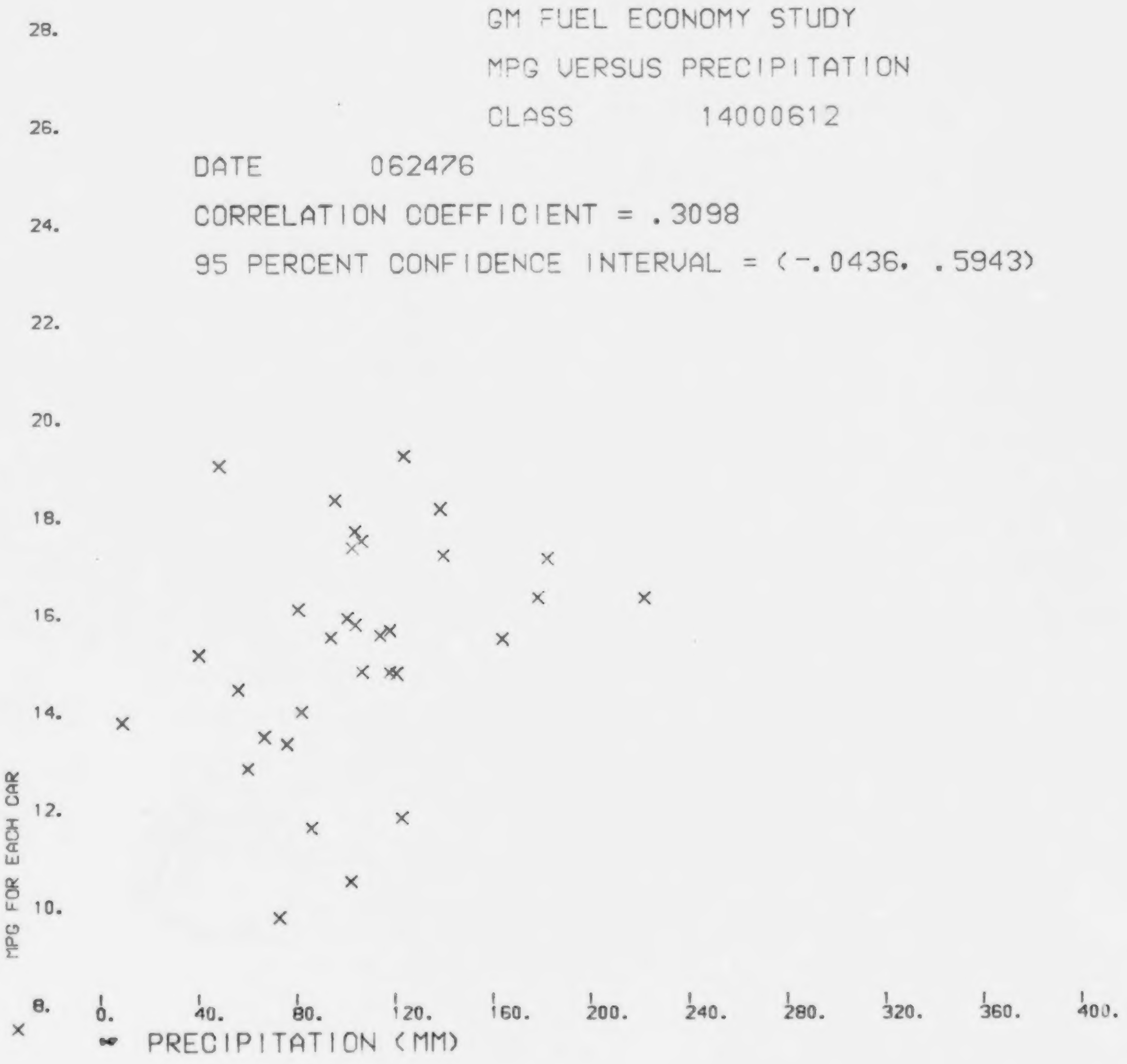
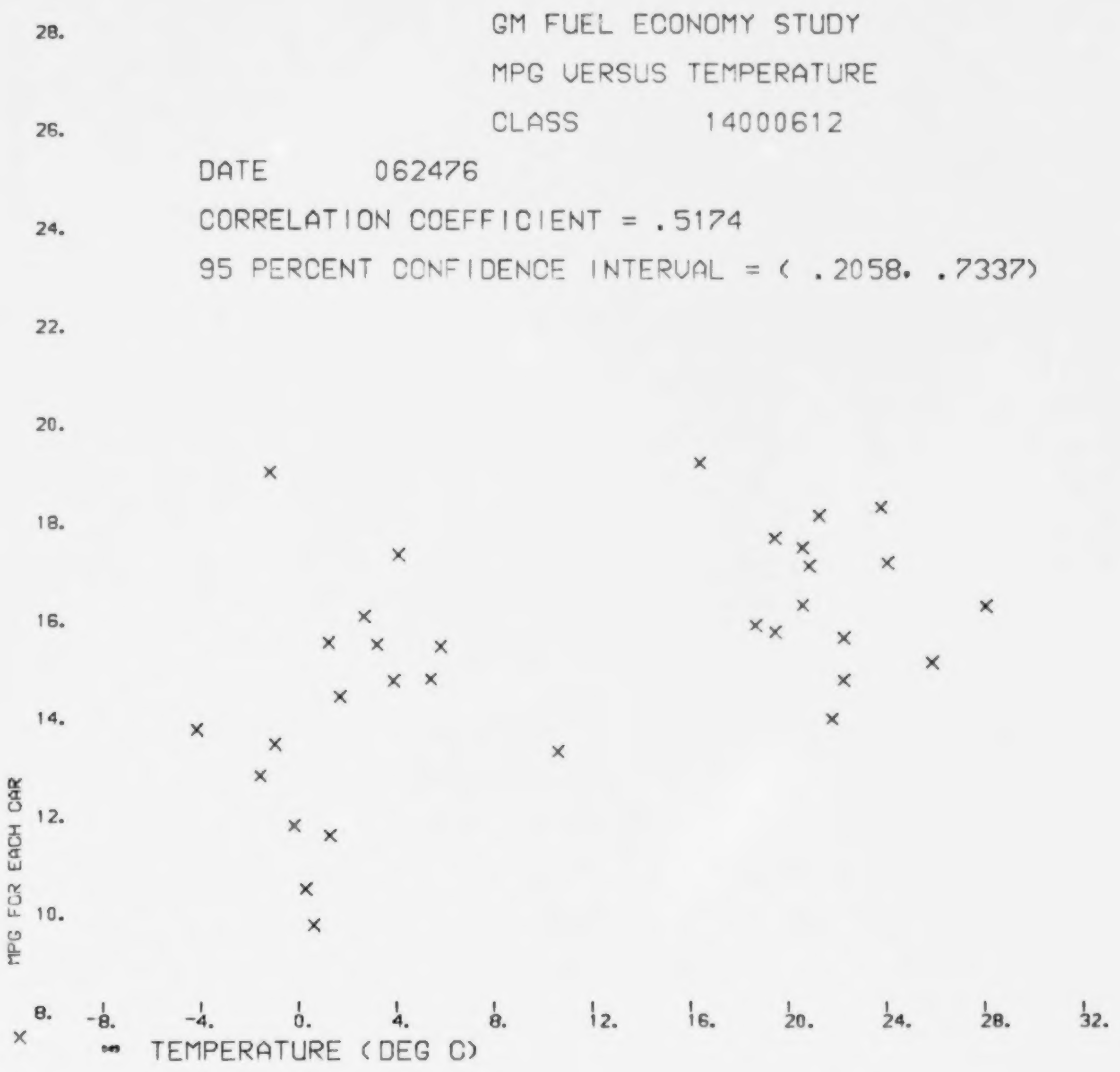




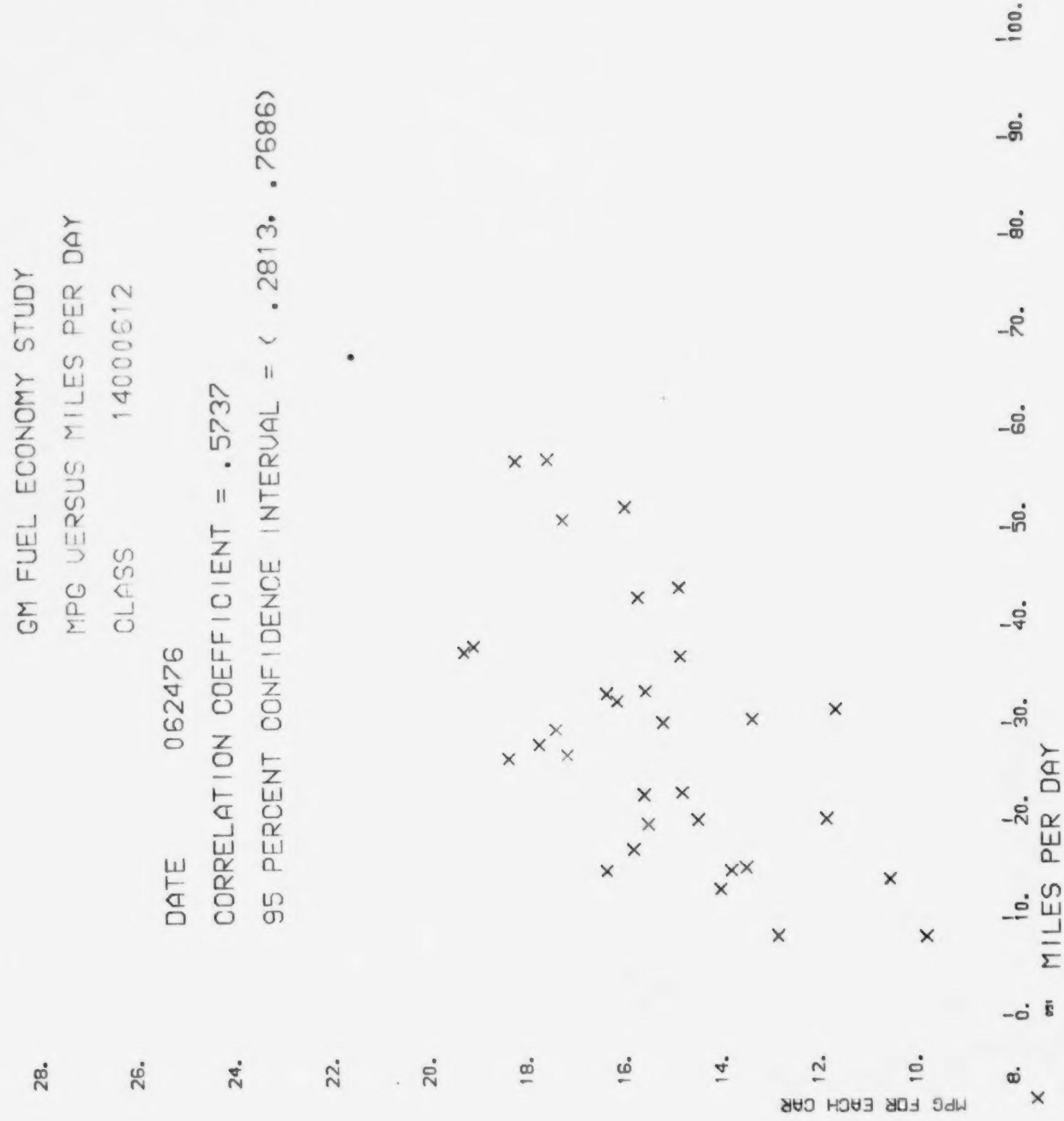
GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 14000612

DATE 062476
CORRELATION COEFFICIENT = .3098
95 PERCENT CONFIDENCE INTERVAL = (-.0436. .5943)



GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 14000612

DATE 062476
CORRELATION COEFFICIENT = .5174
95 PERCENT CONFIDENCE INTERVAL = (.2058. .7337)



GM FUEL ECONOMY STUDY

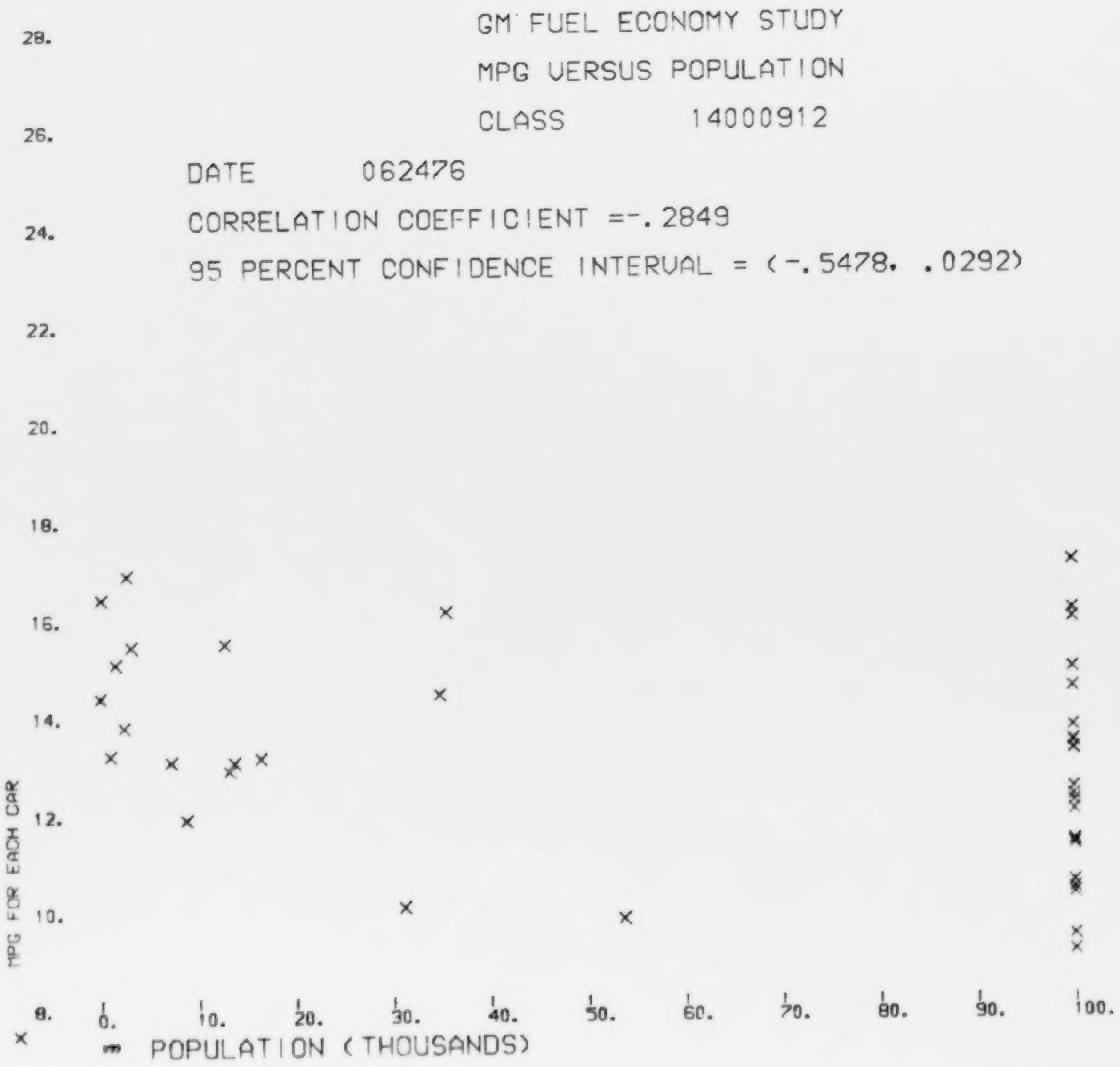
MPG VERSUS MILES PER DAY

CLASS 14000612

DATE 062476

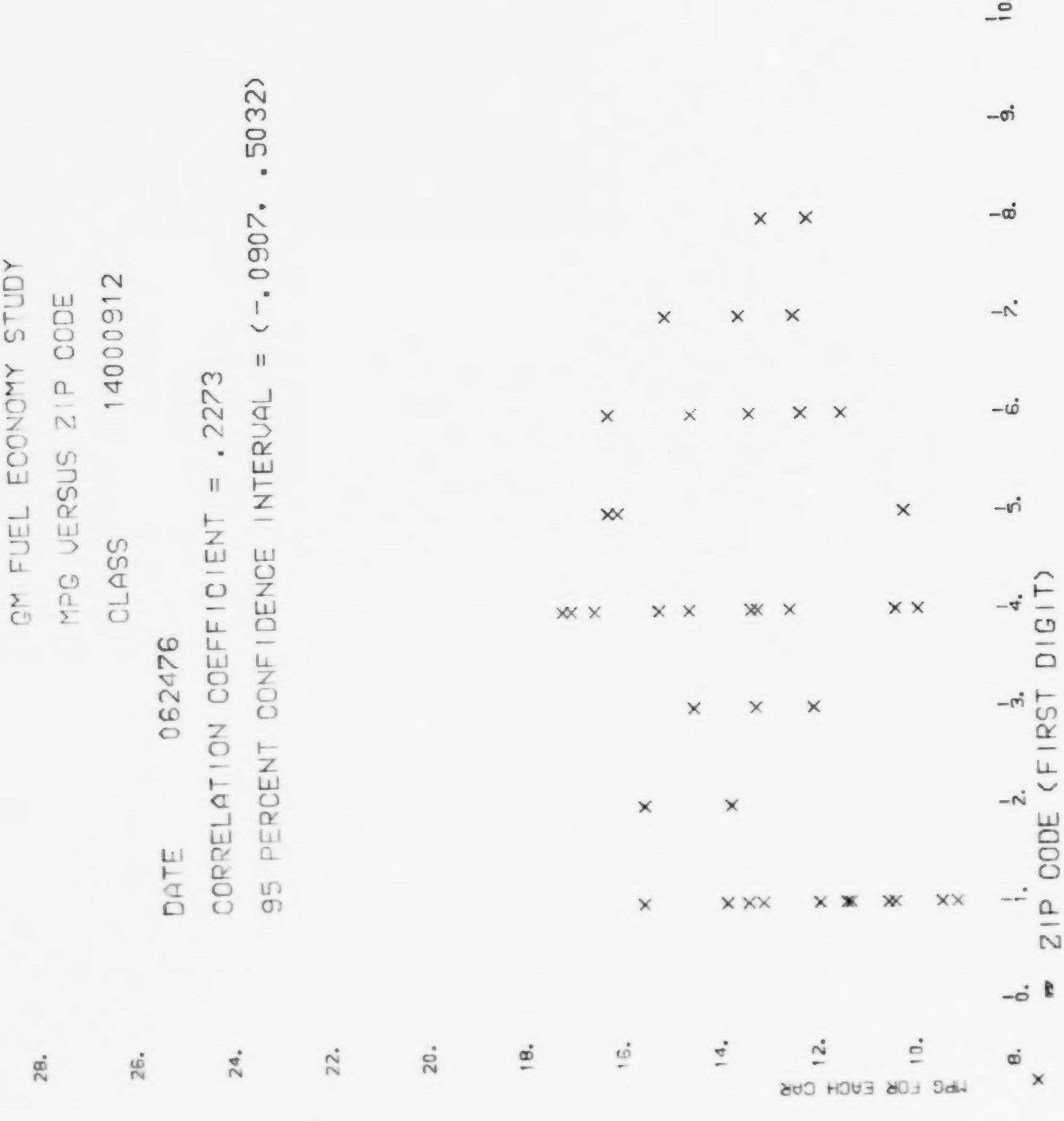
CORRELATION COEFFICIENT = .5737

95 PERCENT CONFIDENCE INTERVAL = (.2813, .7686)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 14000912

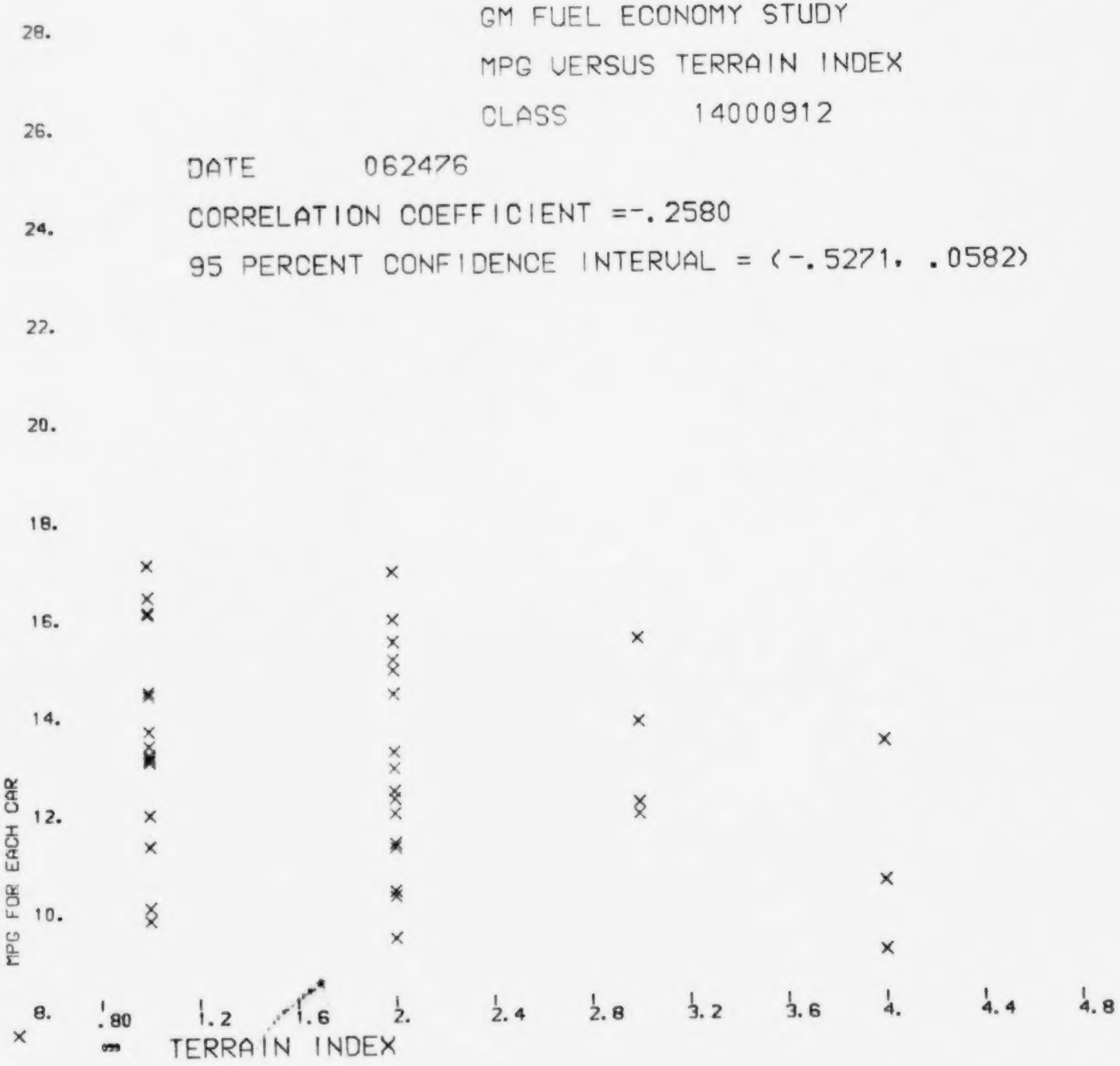
DATE 062476
CORRELATION COEFFICIENT =-.2849
95 PERCENT CONFIDENCE INTERVAL = (-.5478, .0292)

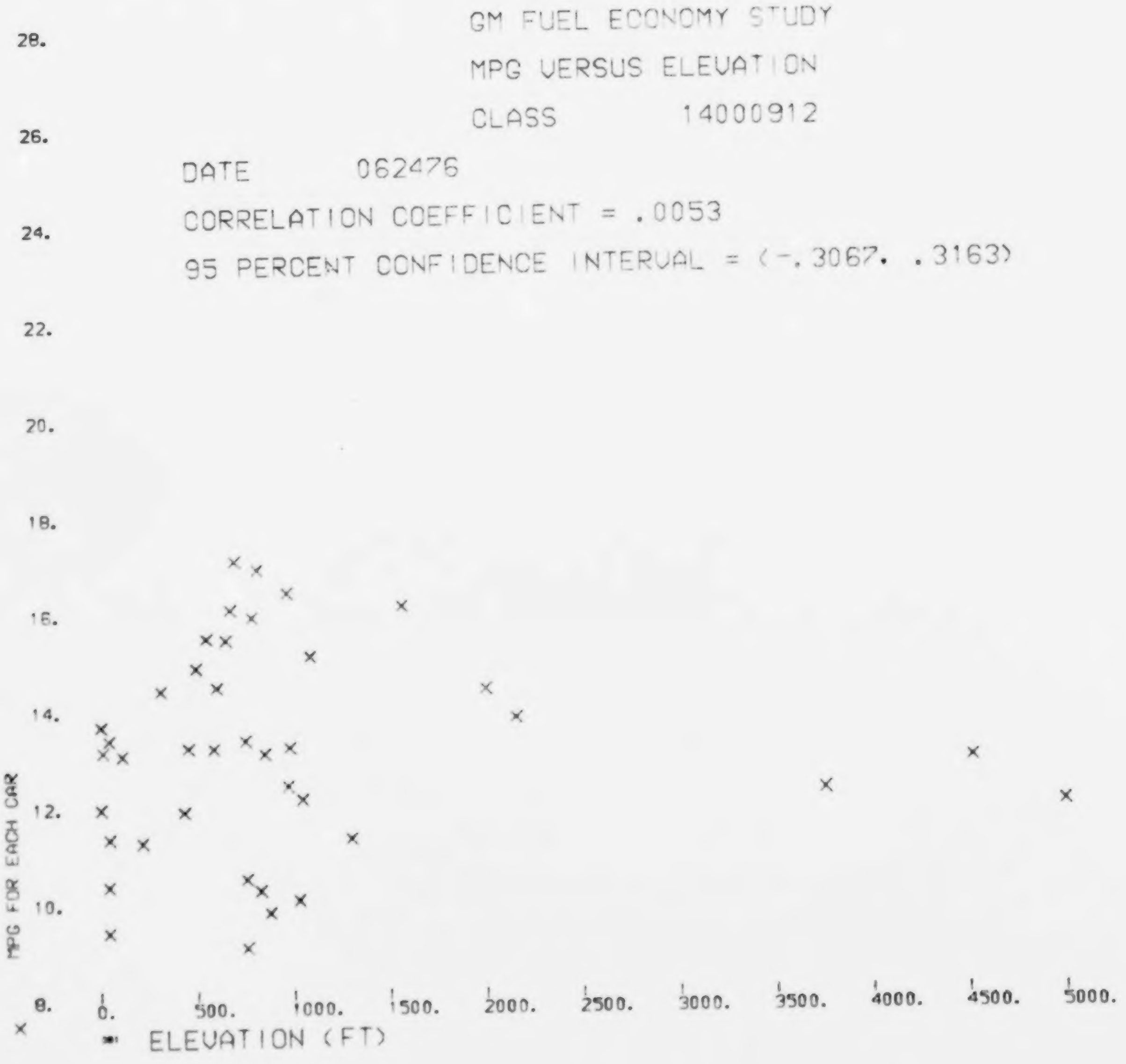

GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 14000912

DATE 062476
CORRELATION COEFFICIENT = .2273
95 PERCENT CONFIDENCE INTERVAL = (-.0907, .5032)

GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 14000912

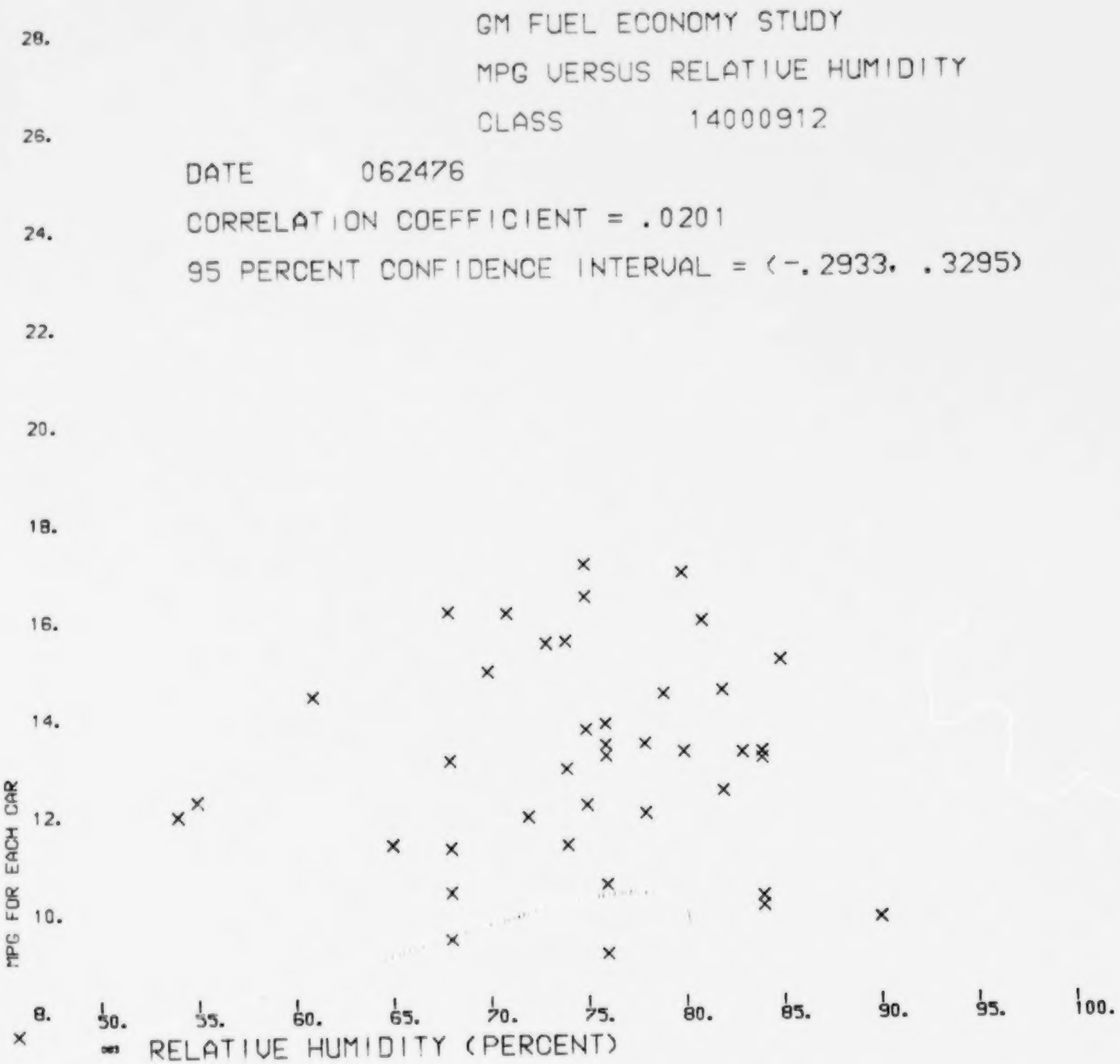
DATE 062476
CORRELATION COEFFICIENT =-.2580
95 PERCENT CONFIDENCE INTERVAL = (-.5271, .0582)





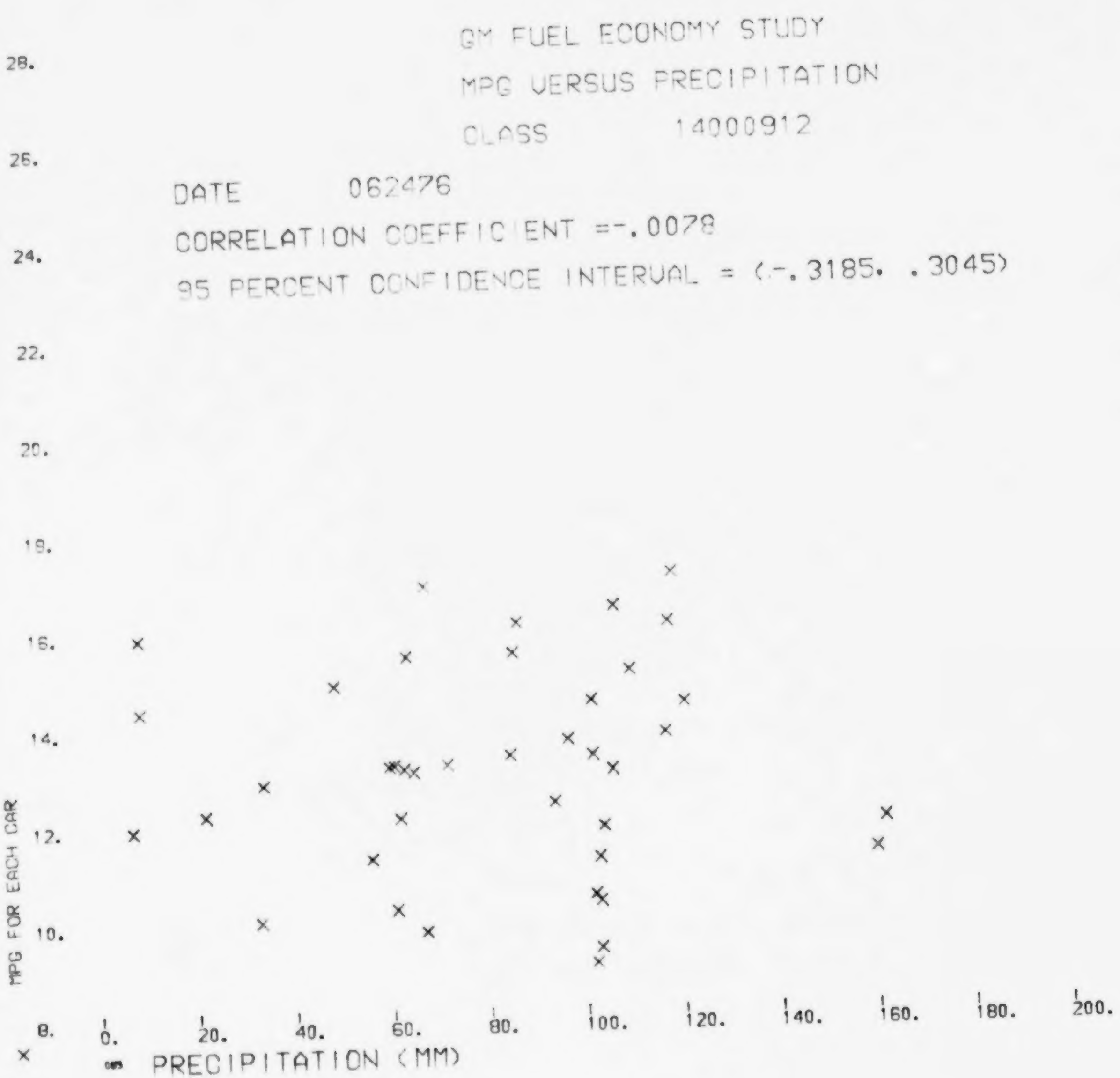
GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 14000912

DATE 062476
CORRELATION COEFFICIENT = .0053
95 PERCENT CONFIDENCE INTERVAL = (-.3067. .3163)



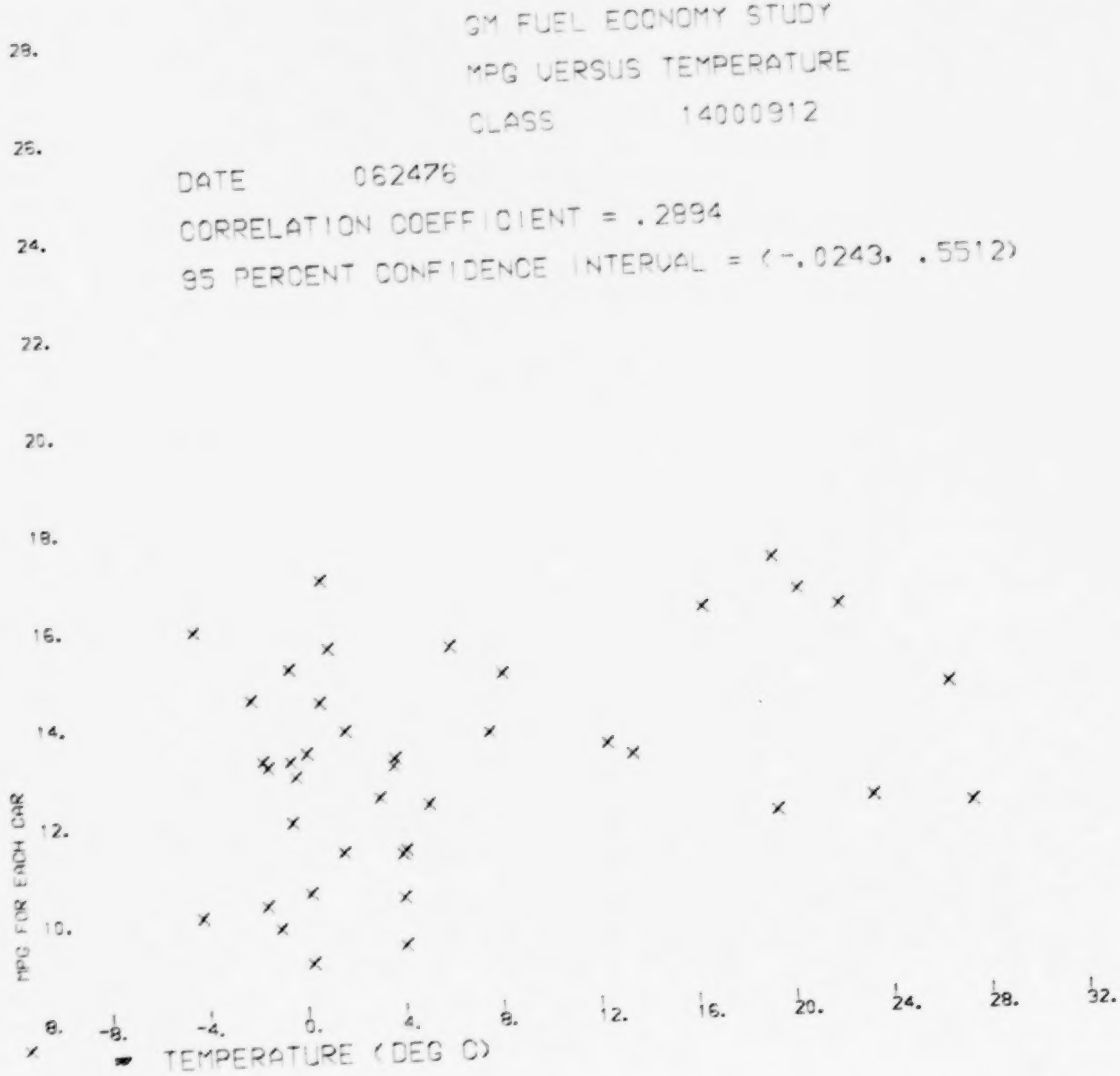
GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 14000912

DATE 062476
CORRELATION COEFFICIENT = .0201
95 PERCENT CONFIDENCE INTERVAL = (-.2933, .3295)



GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 14000912

DATE 062476
CORRELATION COEFFICIENT =-.0078
95 PERCENT CONFIDENCE INTERVAL = (-.3185, .3045)



GM FUEL ECONOMY STUDY

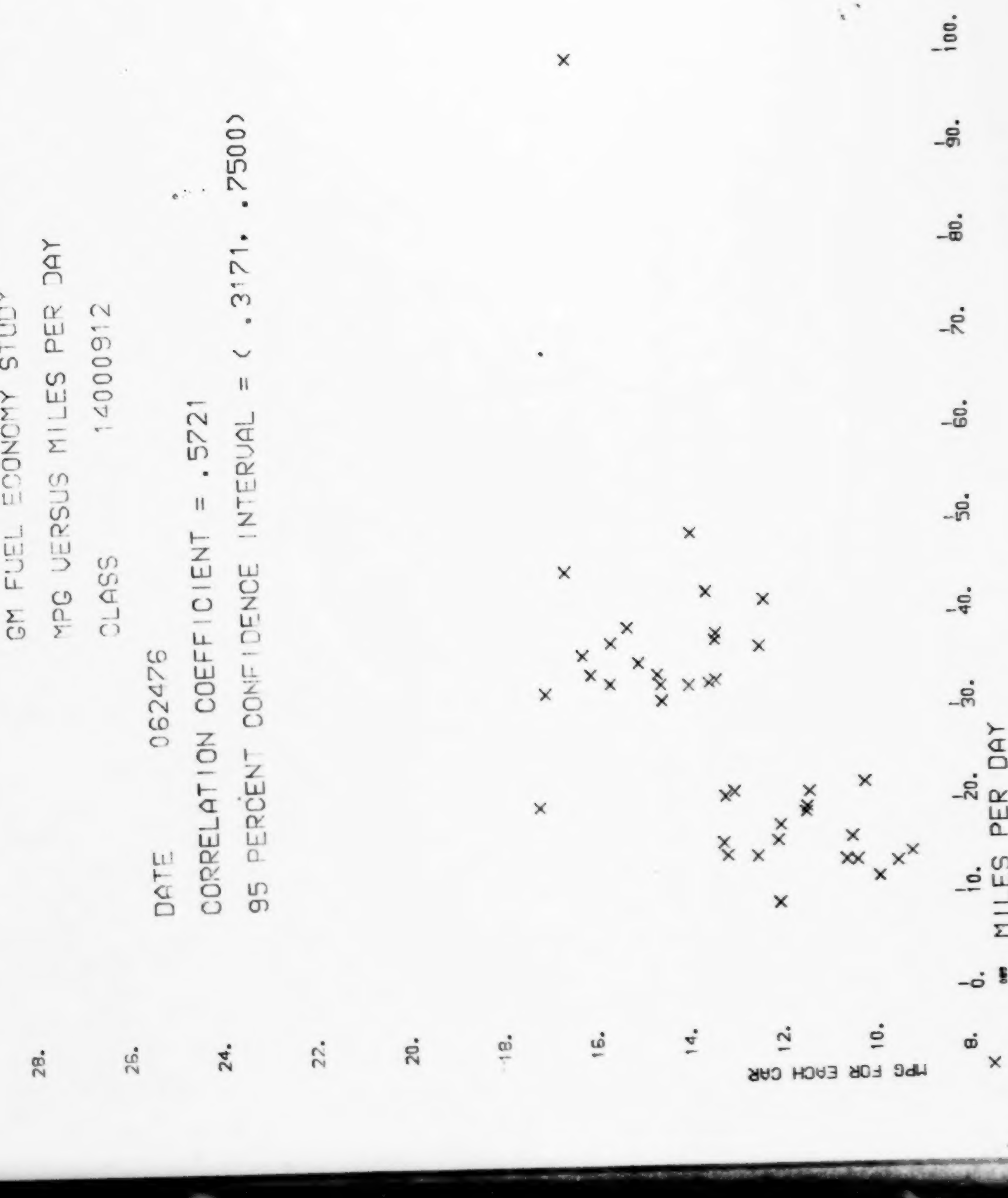
MPG VERSUS TEMPERATURE

CLASS 14000912

DATE 062476

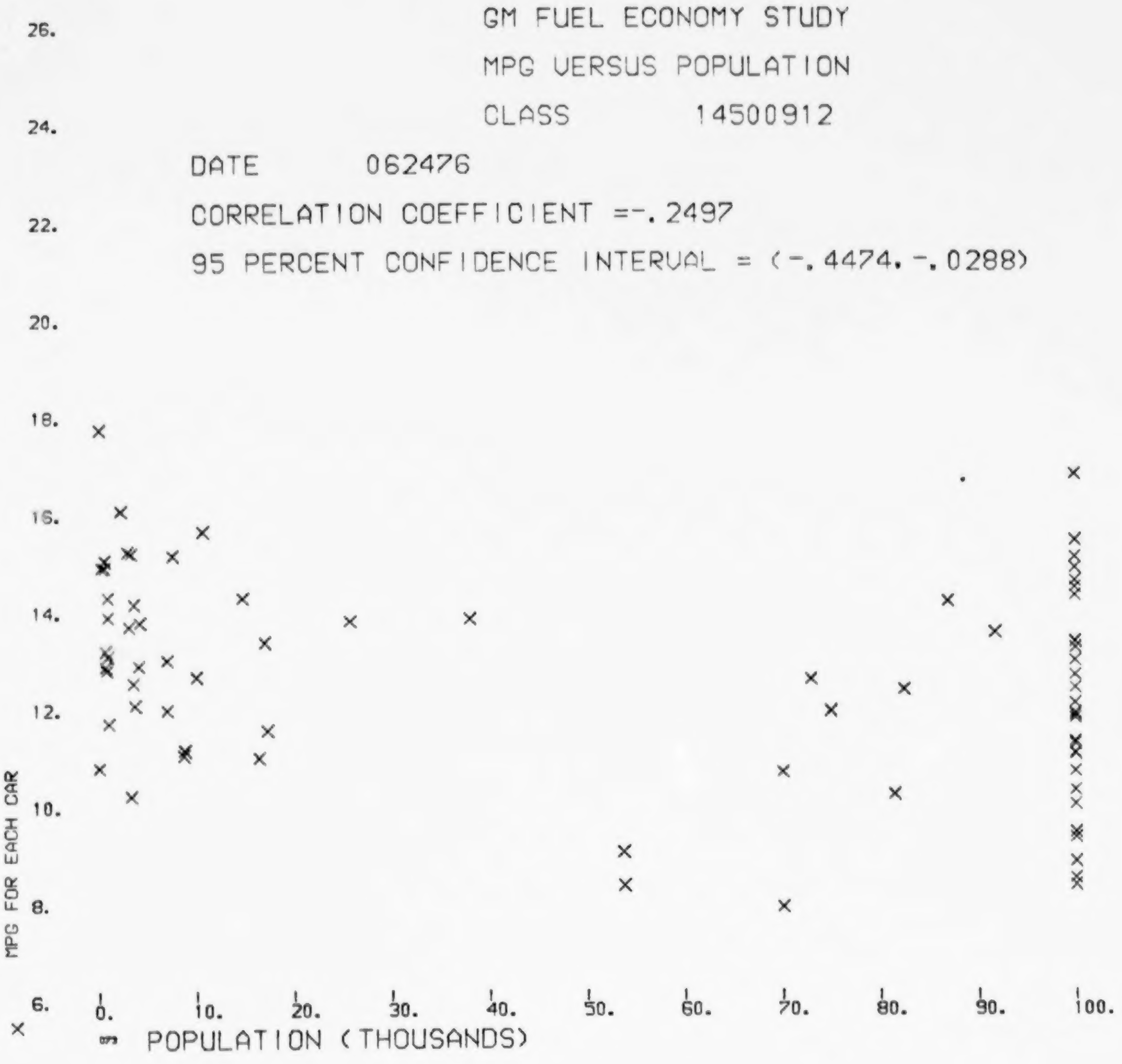
CORRELATION COEFFICIENT = .2894

95 PERCENT CONFIDENCE INTERVAL = (-.0243, .5512)



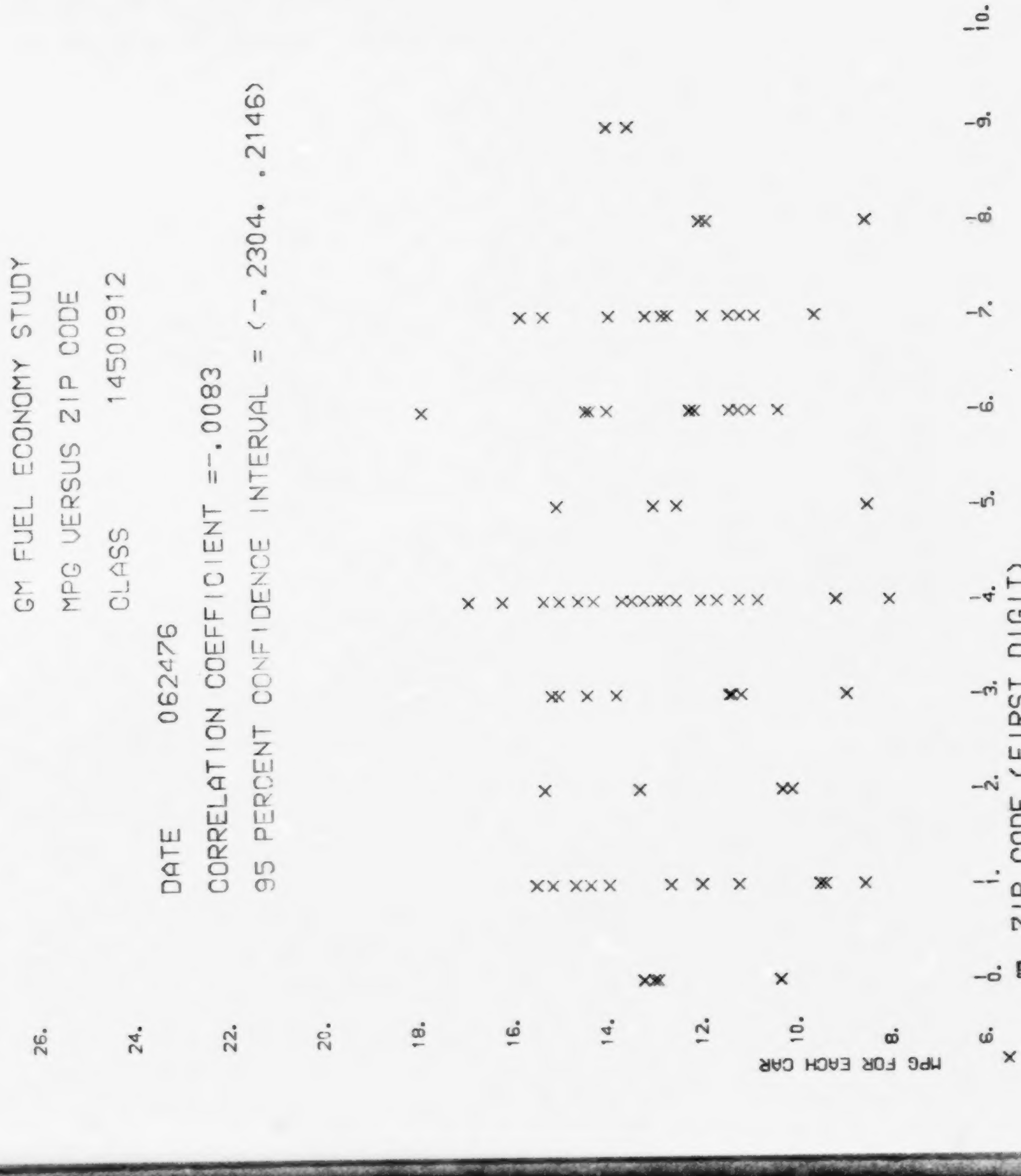
GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 14000912

DATE 062476
CORRELATION COEFFICIENT = .5721
95 PERCENT CONFIDENCE INTERVAL = (.3171, .7500)



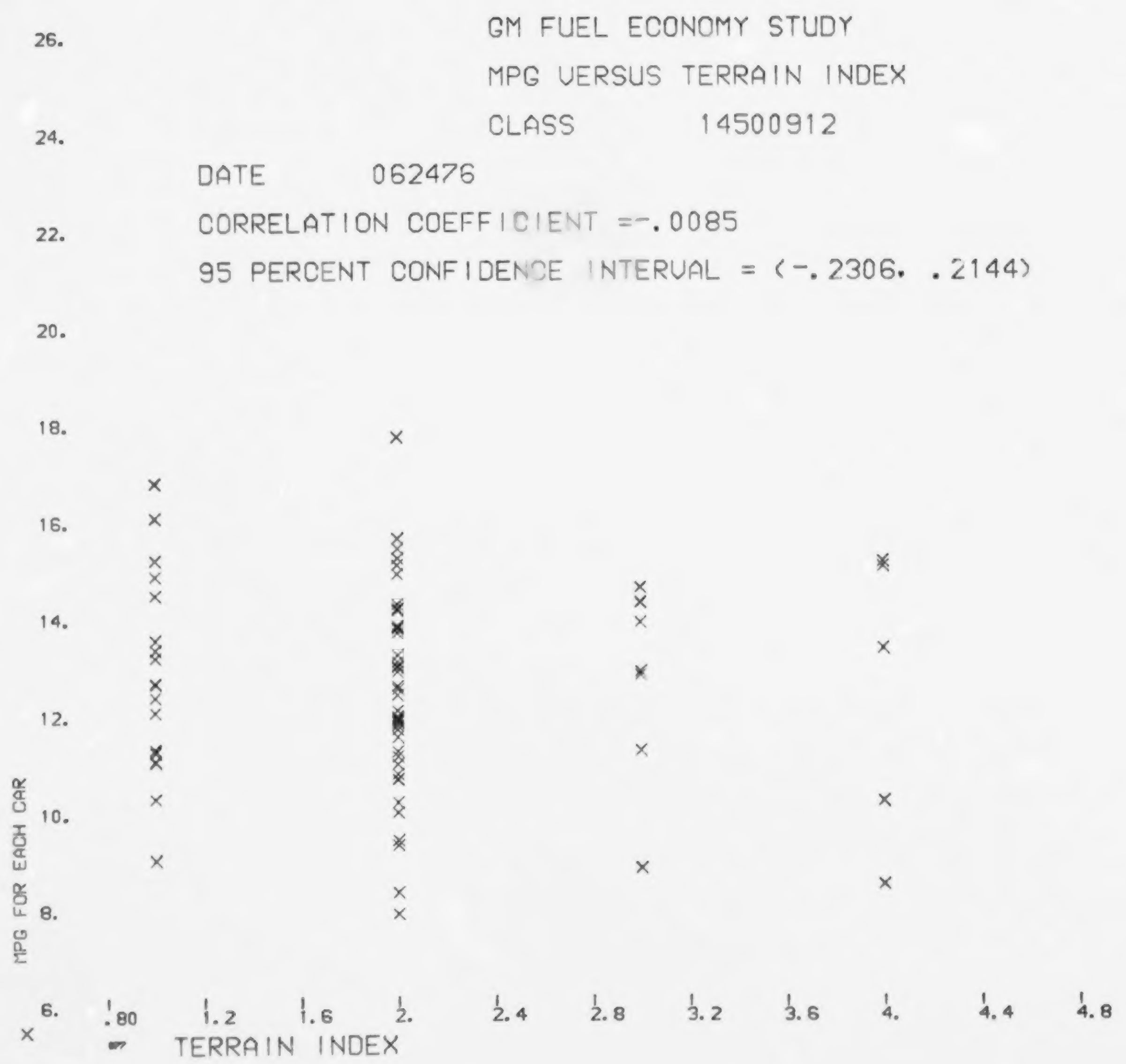
GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 14500912

DATE 062476
CORRELATION COEFFICIENT =-.2497
95 PERCENT CONFIDENCE INTERVAL = (-.4474.-.0288)



GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 14500912

DATE 062476
CORRELATION COEFFICIENT =-.0083
95 PERCENT CONFIDENCE INTERVAL = (-.2304, .2146)



GM FUEL ECONOMY STUDY

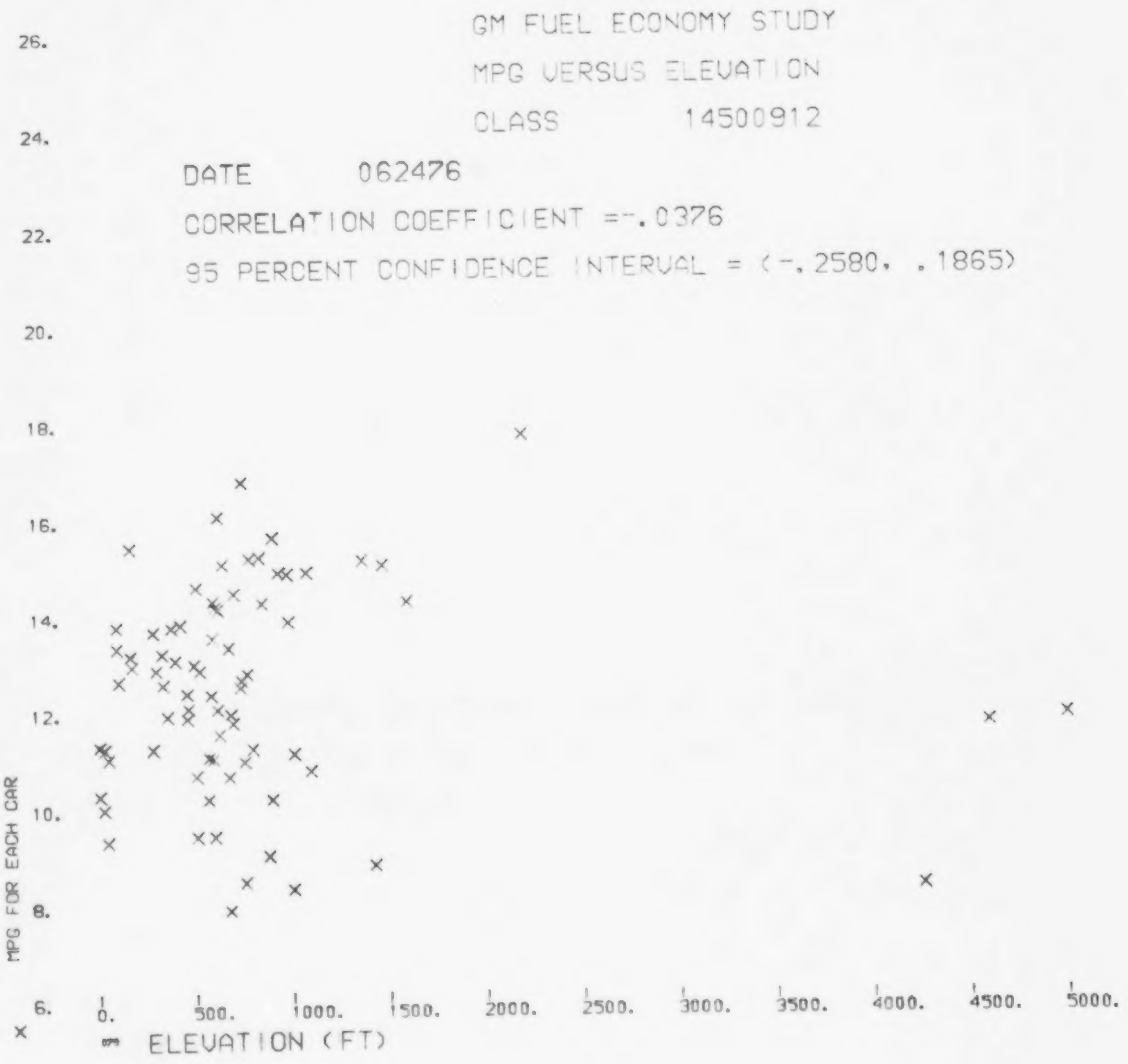
MPG VERSUS TERRAIN INDEX

CLASS 14500912

DATE 062476

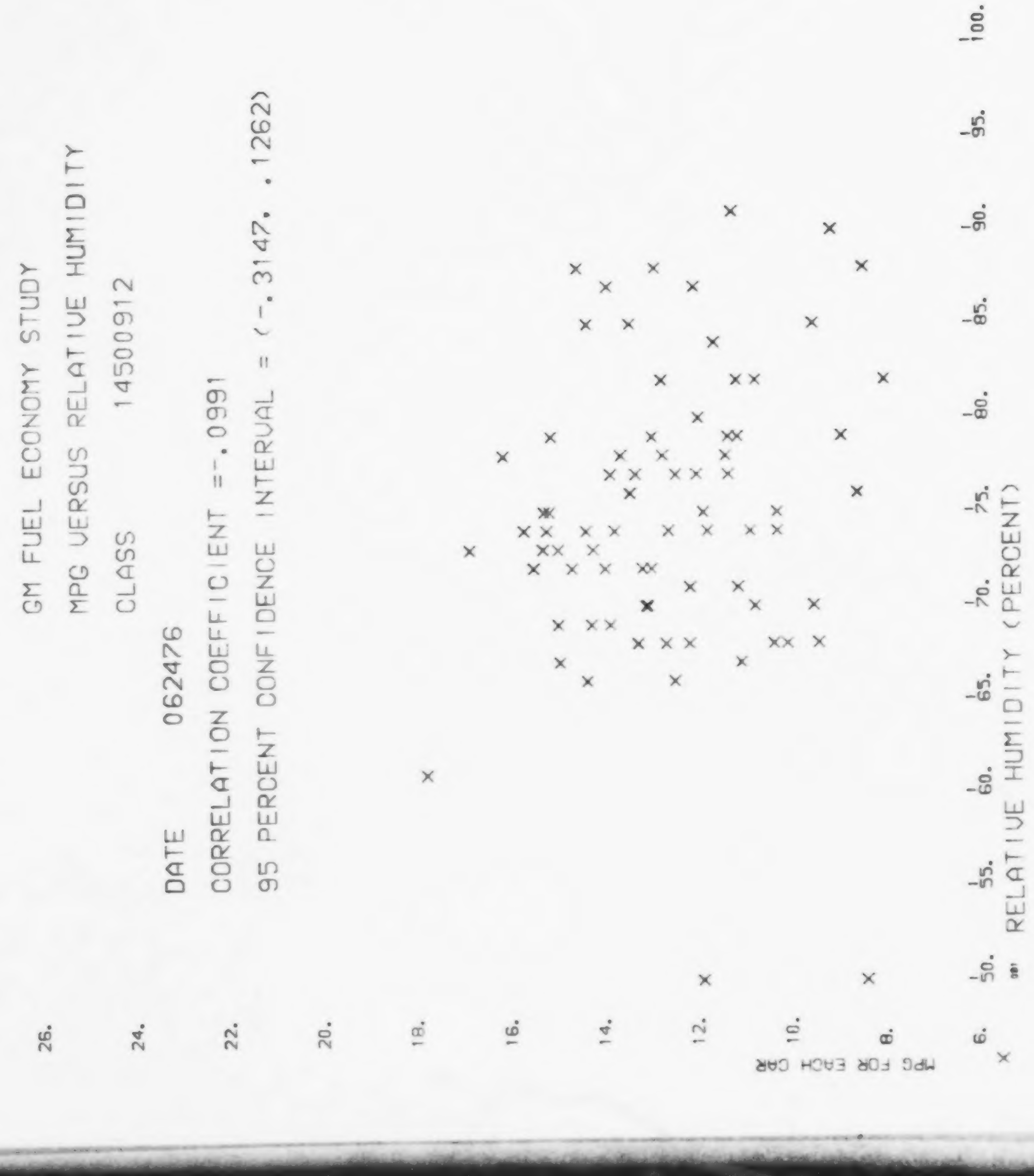
CORRELATION COEFFICIENT =-.0085

95 PERCENT CONFIDENCE INTERVAL = (-.2306. .2144)



GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 14500912

DATE 062476
CORRELATION COEFFICIENT =-.0376
95 PERCENT CONFIDENCE INTERVAL = (-.2580, .1865)



GM FUEL ECONOMY STUDY

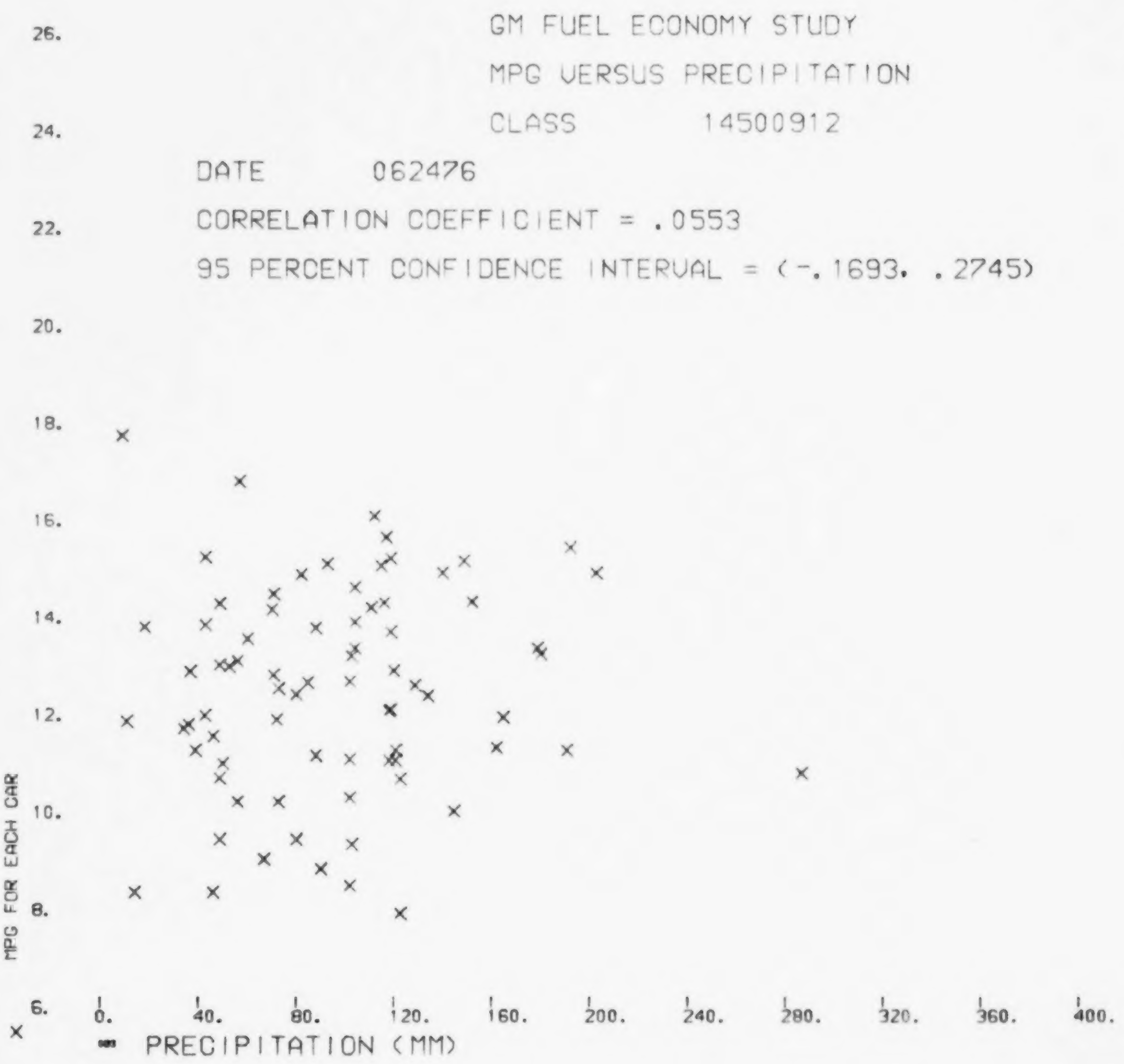
MPG VERSUS RELATIVE HUMIDITY

CLASS 14500912

DATE 062476

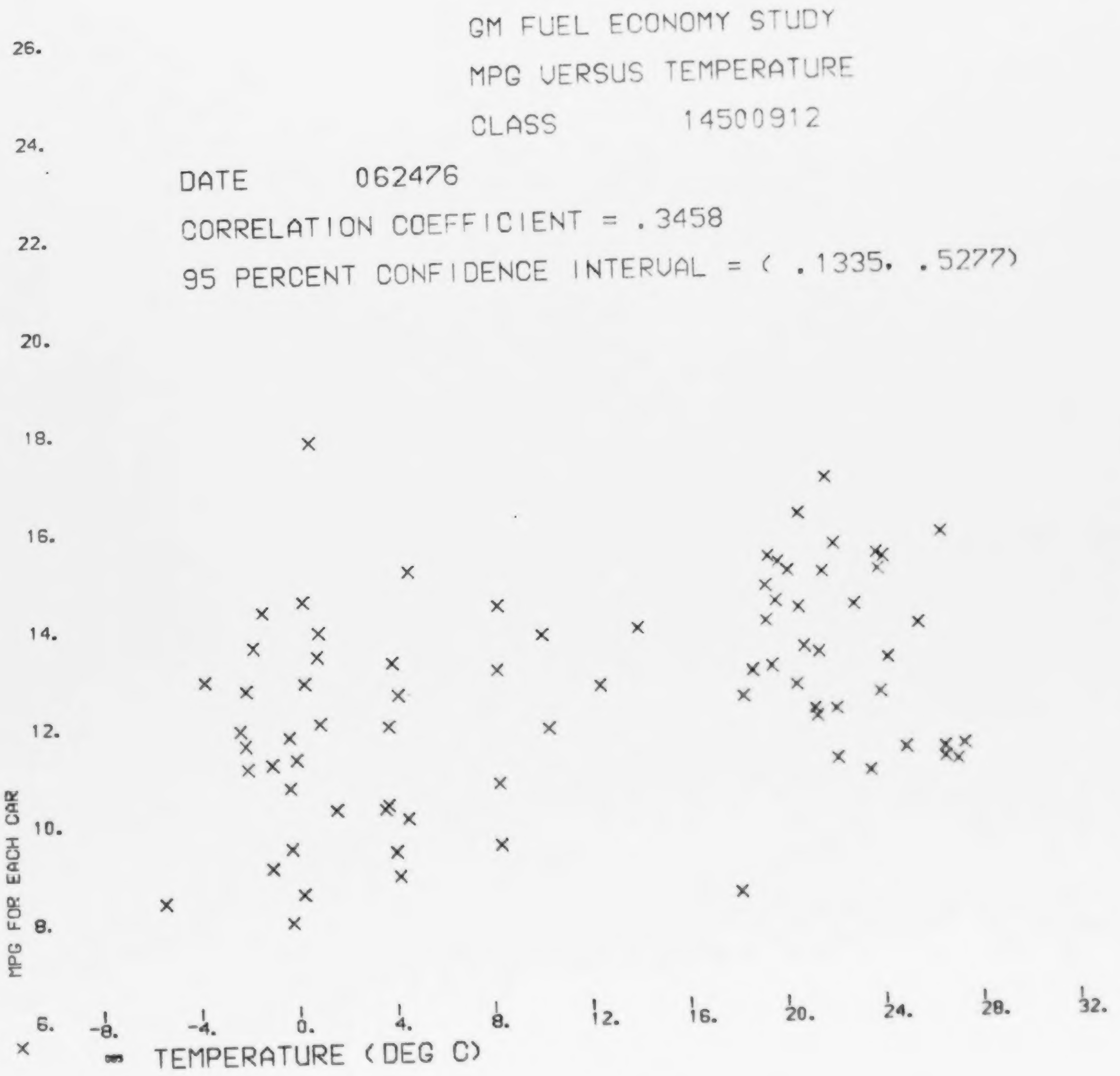
CORRELATION COEFFICIENT =-.0991

95 PERCENT CONFIDENCE INTERVAL = (-.3147, .1262)



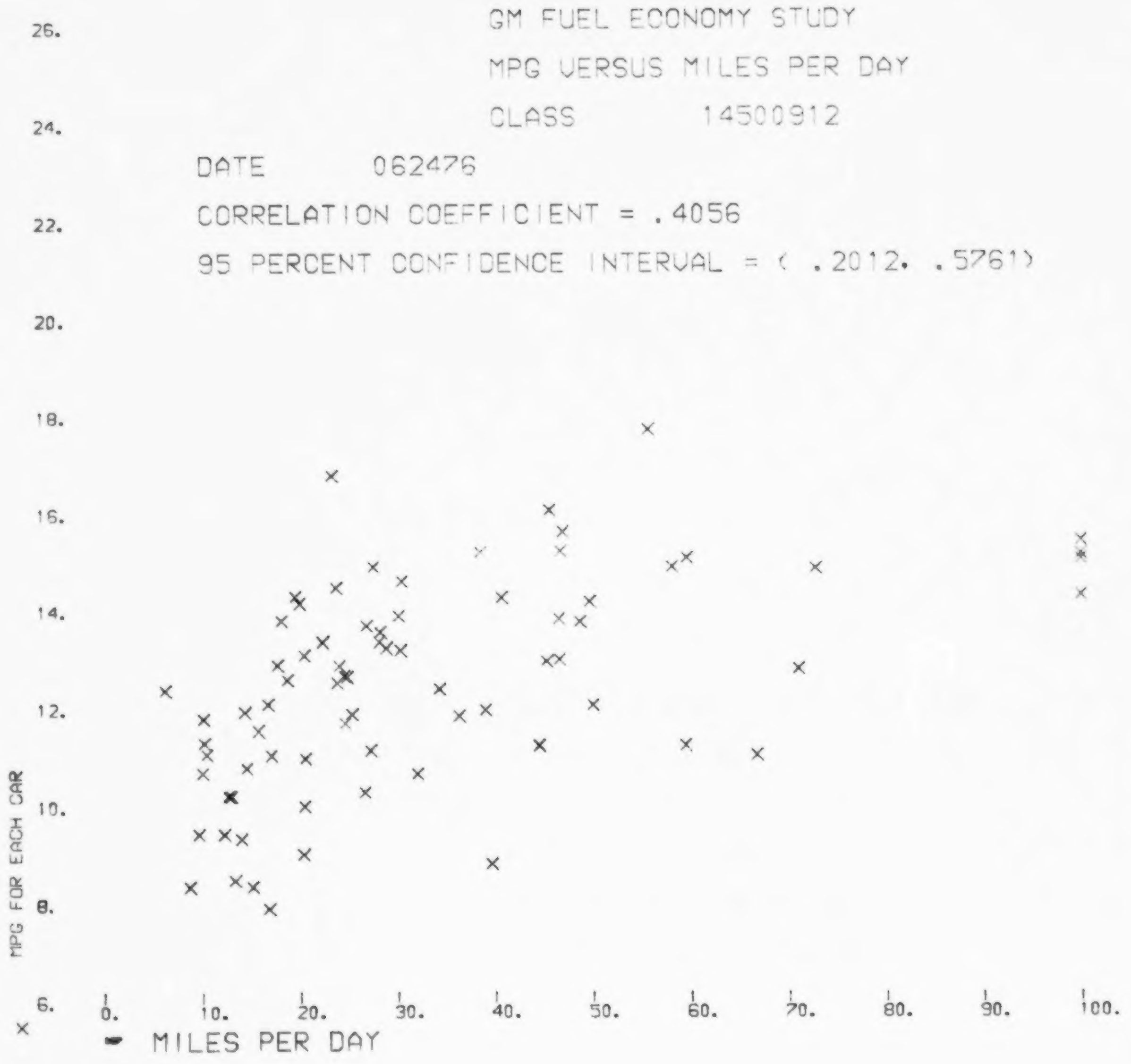
GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 14500912

DATE 062476
CORRELATION COEFFICIENT = .0553
95 PERCENT CONFIDENCE INTERVAL = (-.1693. .2745)



GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 14500912

DATE 062476
CORRELATION COEFFICIENT = .3458
95 PERCENT CONFIDENCE INTERVAL = (.1335, .5277)

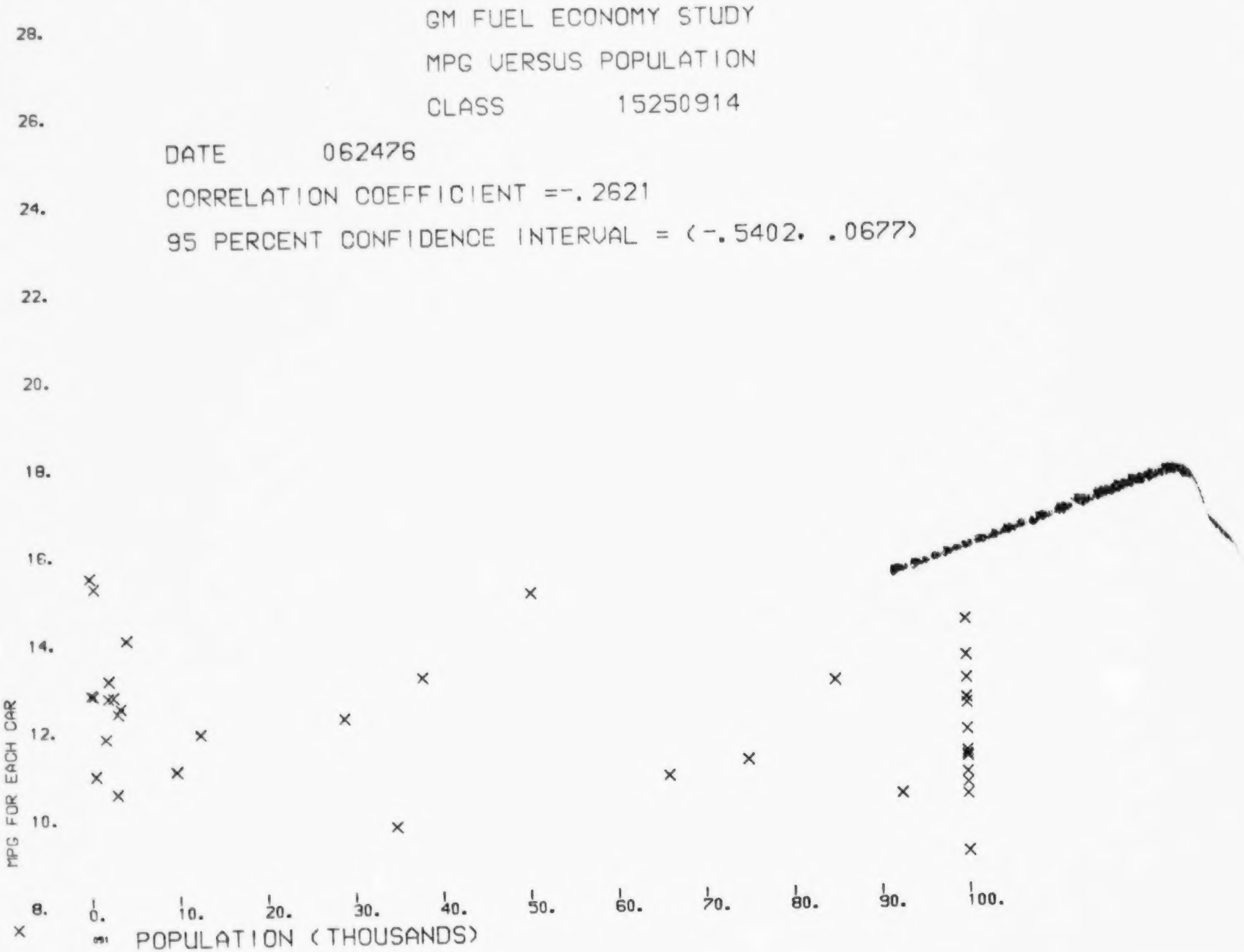


GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 14500912

DATE 062476

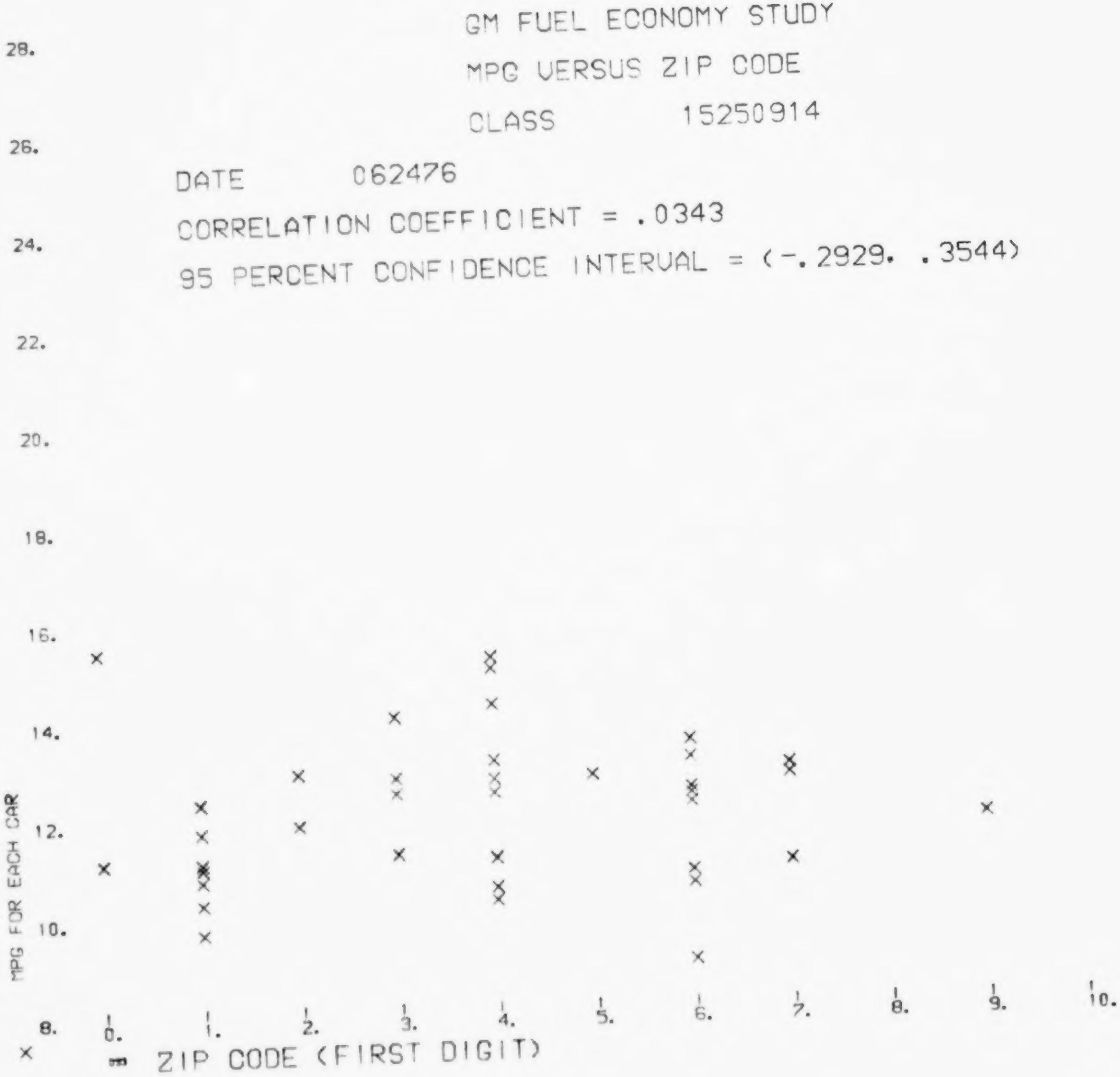
CORRELATION COEFFICIENT = .4056

95 PERCENT CONFIDENCE INTERVAL = (.2012, .5761)



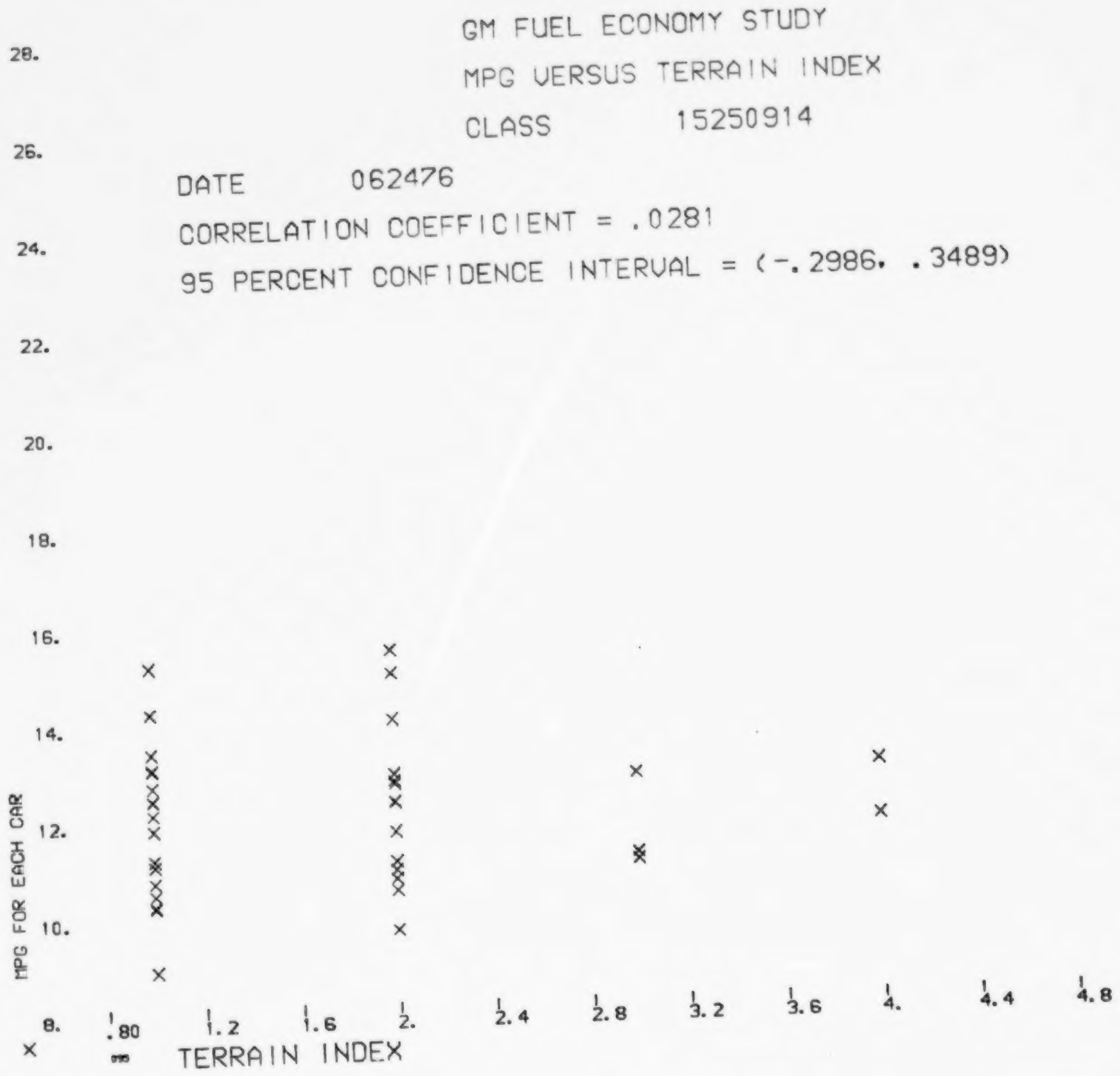
GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 15250914

DATE 062476
CORRELATION COEFFICIENT =-.2621
95 PERCENT CONFIDENCE INTERVAL = (-.5402. .0677)



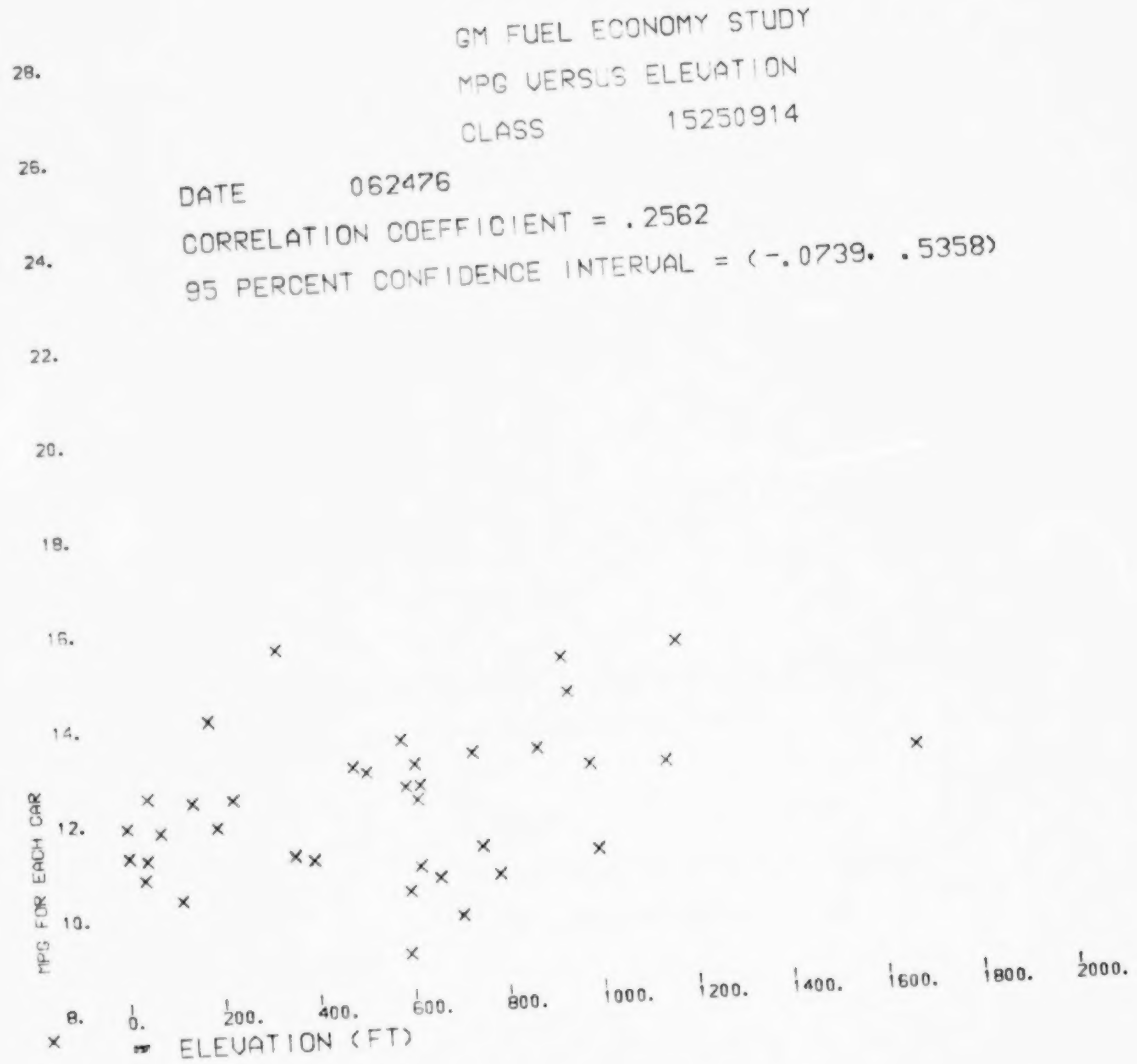
GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 15250914

DATE 062476
CORRELATION COEFFICIENT = .0343
95 PERCENT CONFIDENCE INTERVAL = (-.2929. .3544)



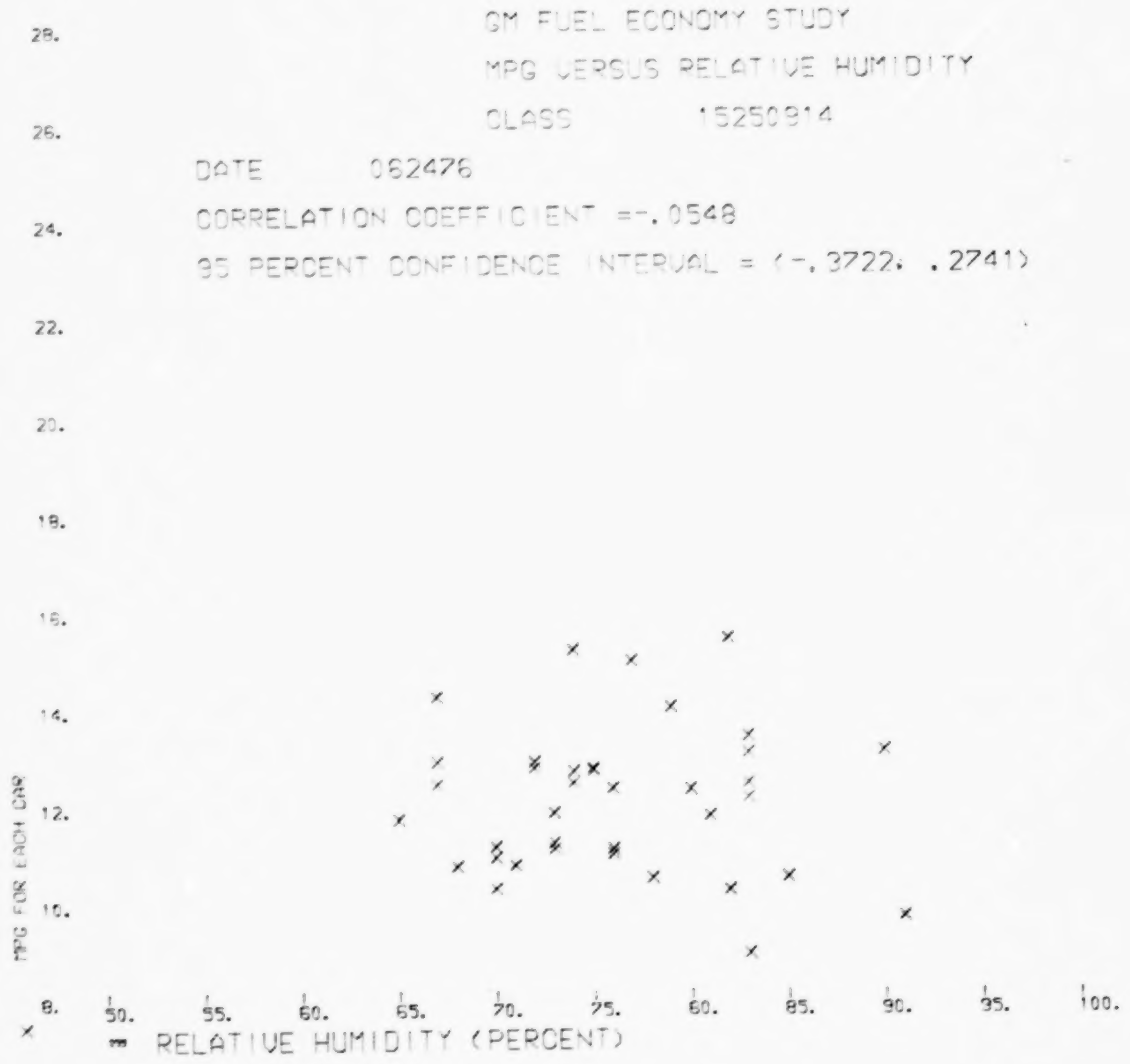
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 15250914

DATE 062476
CORRELATION COEFFICIENT = .0281
95 PERCENT CONFIDENCE INTERVAL = (-.2986. .3489)



GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 15250914

DATE 062476
CORRELATION COEFFICIENT = .2562
95 PERCENT CONFIDENCE INTERVAL = (-.0739. .5358)



GM FUEL ECONOMY STUDY

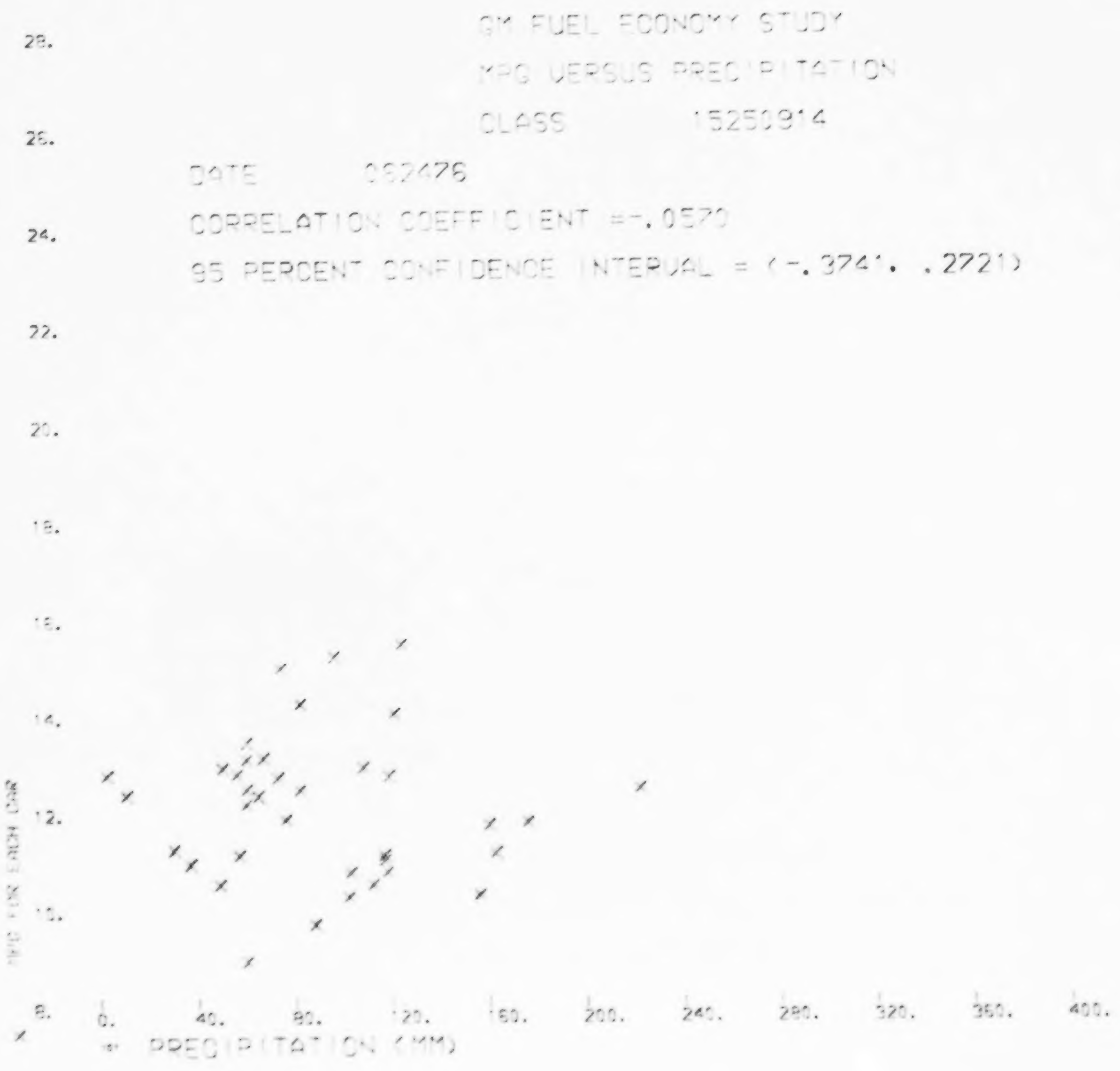
MPG VERSUS RELATIVE HUMIDITY

CLASS 15250914

DATE 062476

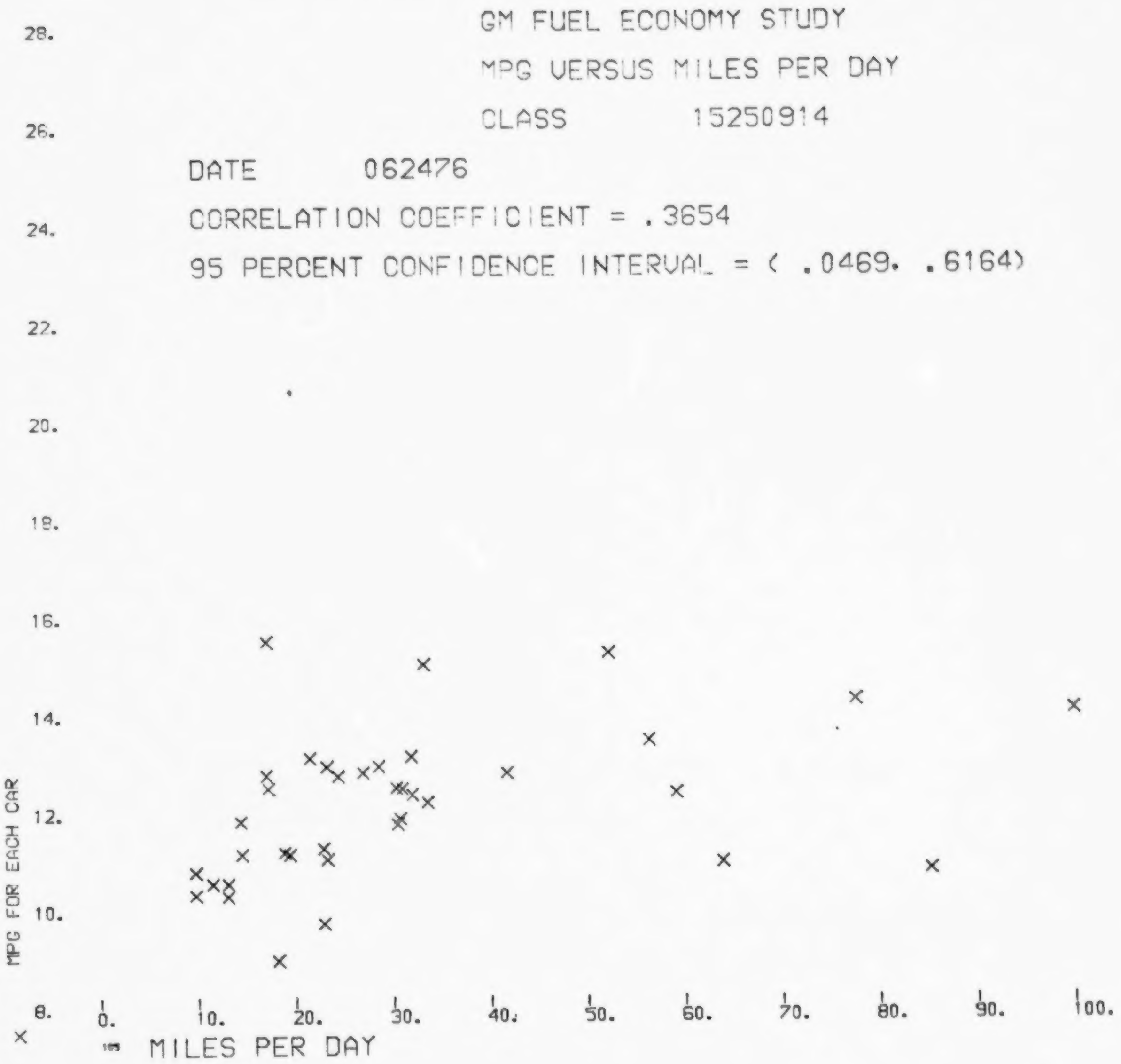
CORRELATION COEFFICIENT =-.0548

95 PERCENT CONFIDENCE INTERVAL = (-.3722, .2741)



GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 15250914

DATE 062476
CORRELATION COEFFICIENT =-.0570
95 PERCENT CONFIDENCE INTERVAL = (-.3741. .2721)

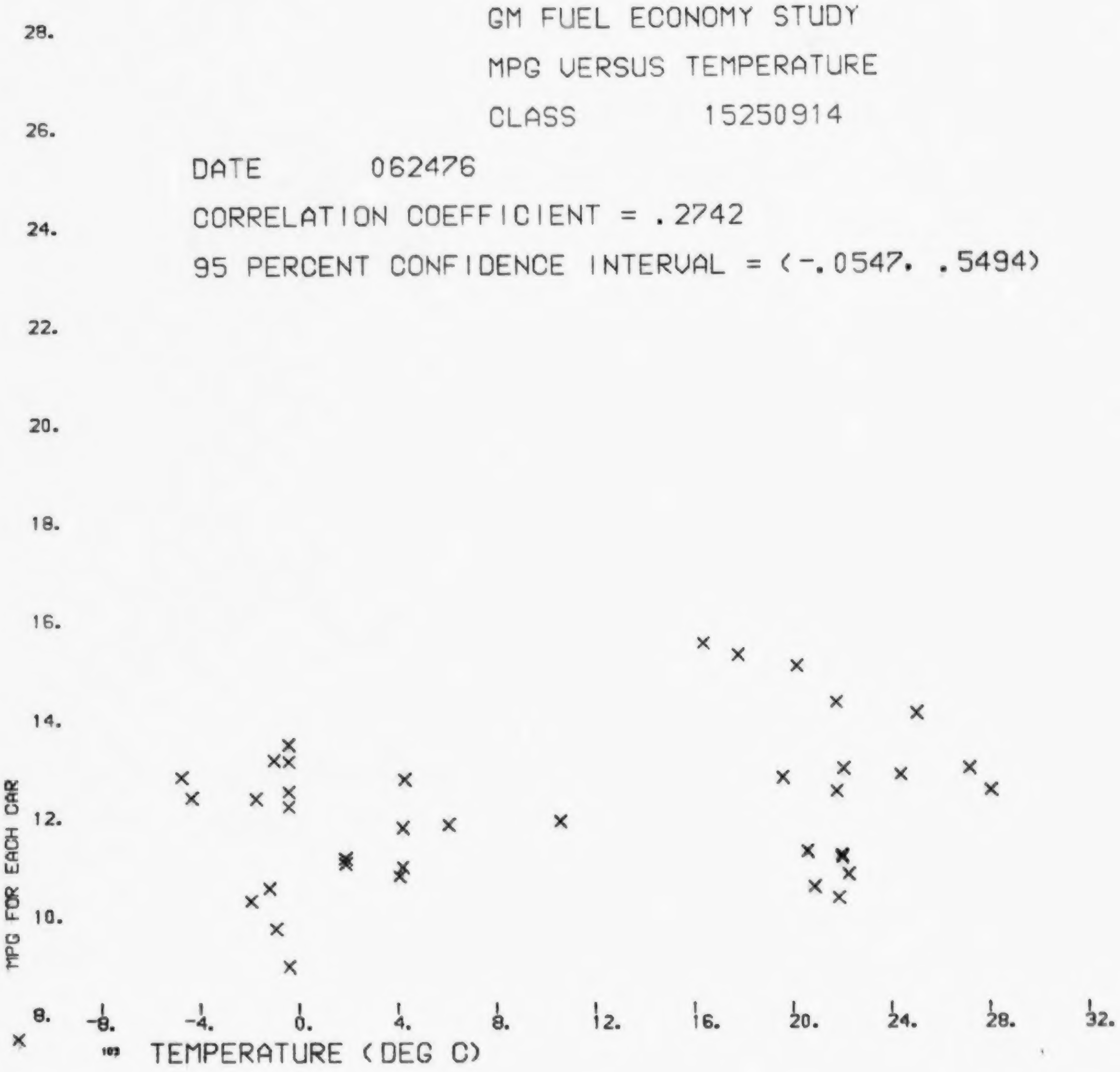


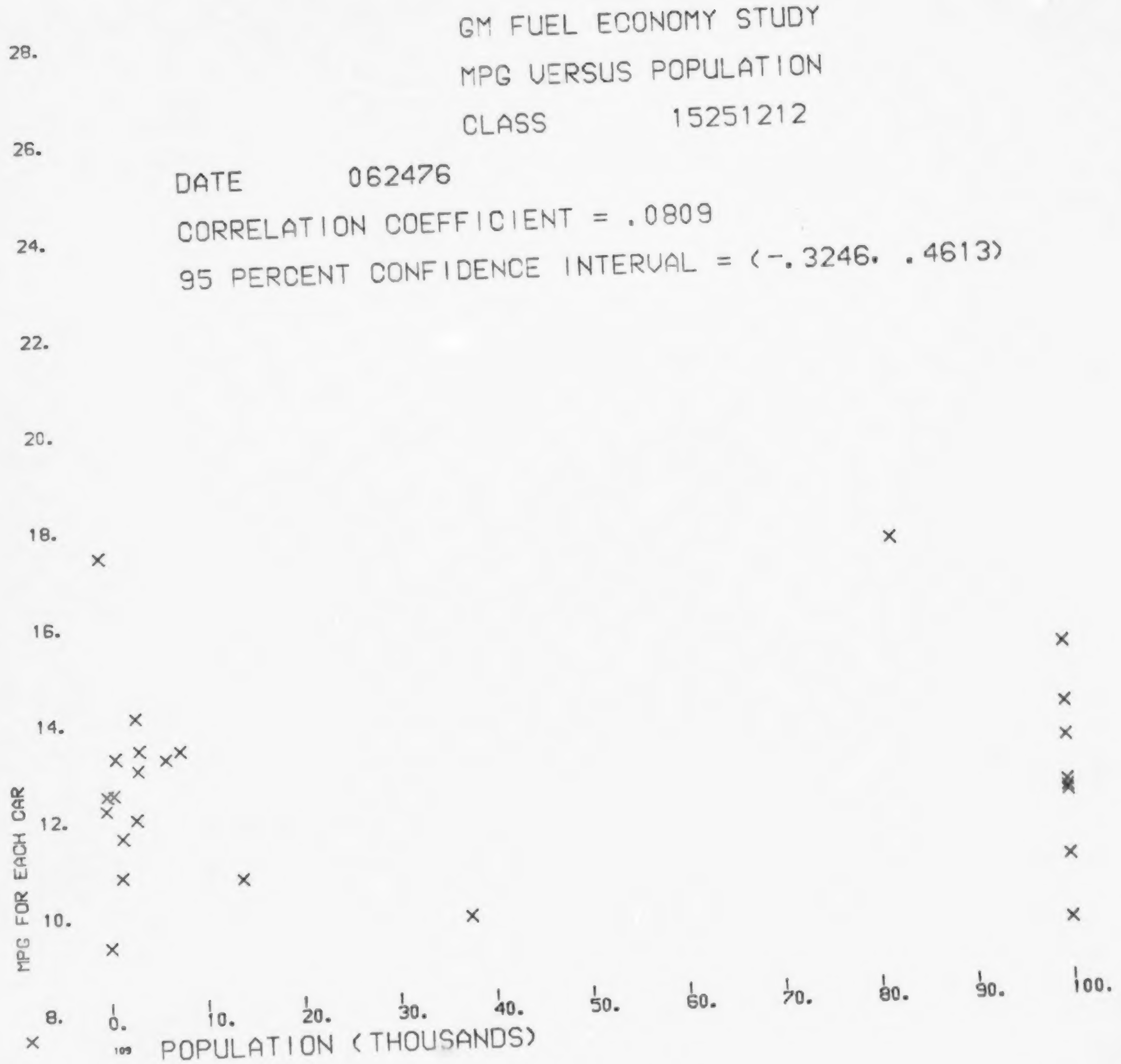
GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 15250914

DATE 062476
CORRELATION COEFFICIENT = .3654
95 PERCENT CONFIDENCE INTERVAL = (.0469. .6164)

GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 15250914

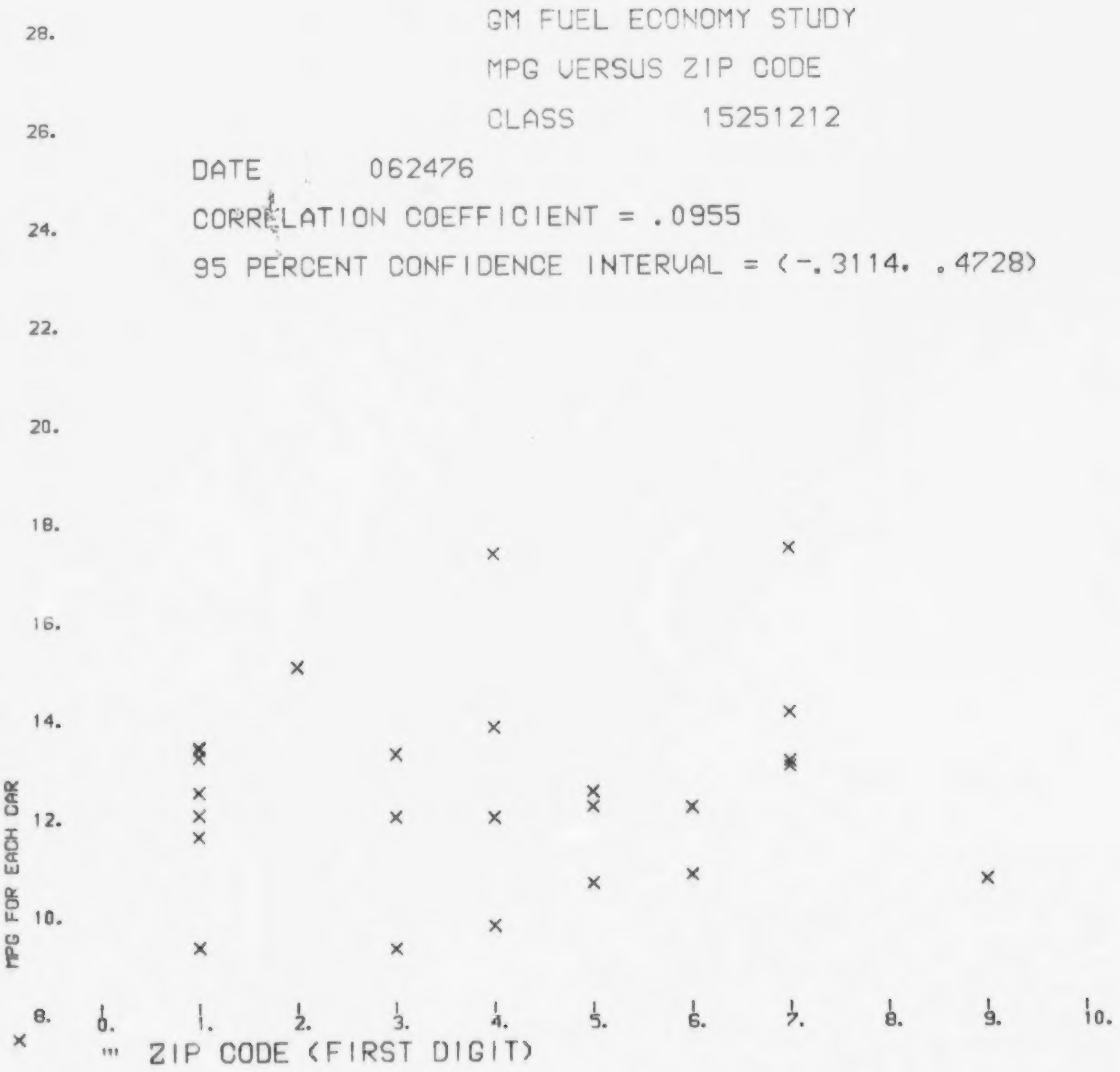
DATE 062476
CORRELATION COEFFICIENT = .2742
95 PERCENT CONFIDENCE INTERVAL = (-.0547. .5494)





GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 15251212

DATE 062476
CORRELATION COEFFICIENT = .0809
95 PERCENT CONFIDENCE INTERVAL = (-.3246. .4613)



GM FUEL ECONOMY STUDY

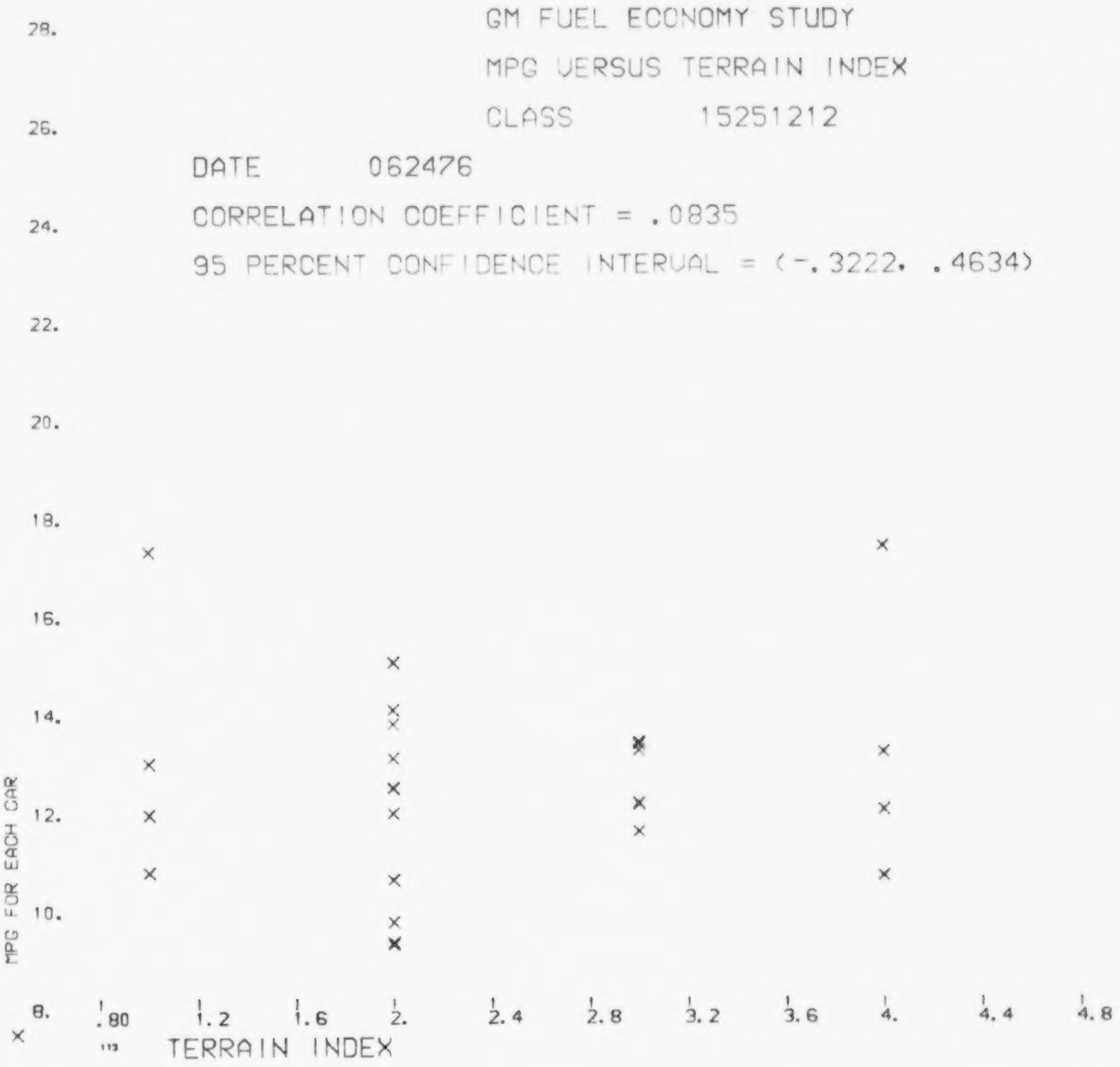
MPG VERSUS ZIP CODE

CLASS 15251212

DATE 062476

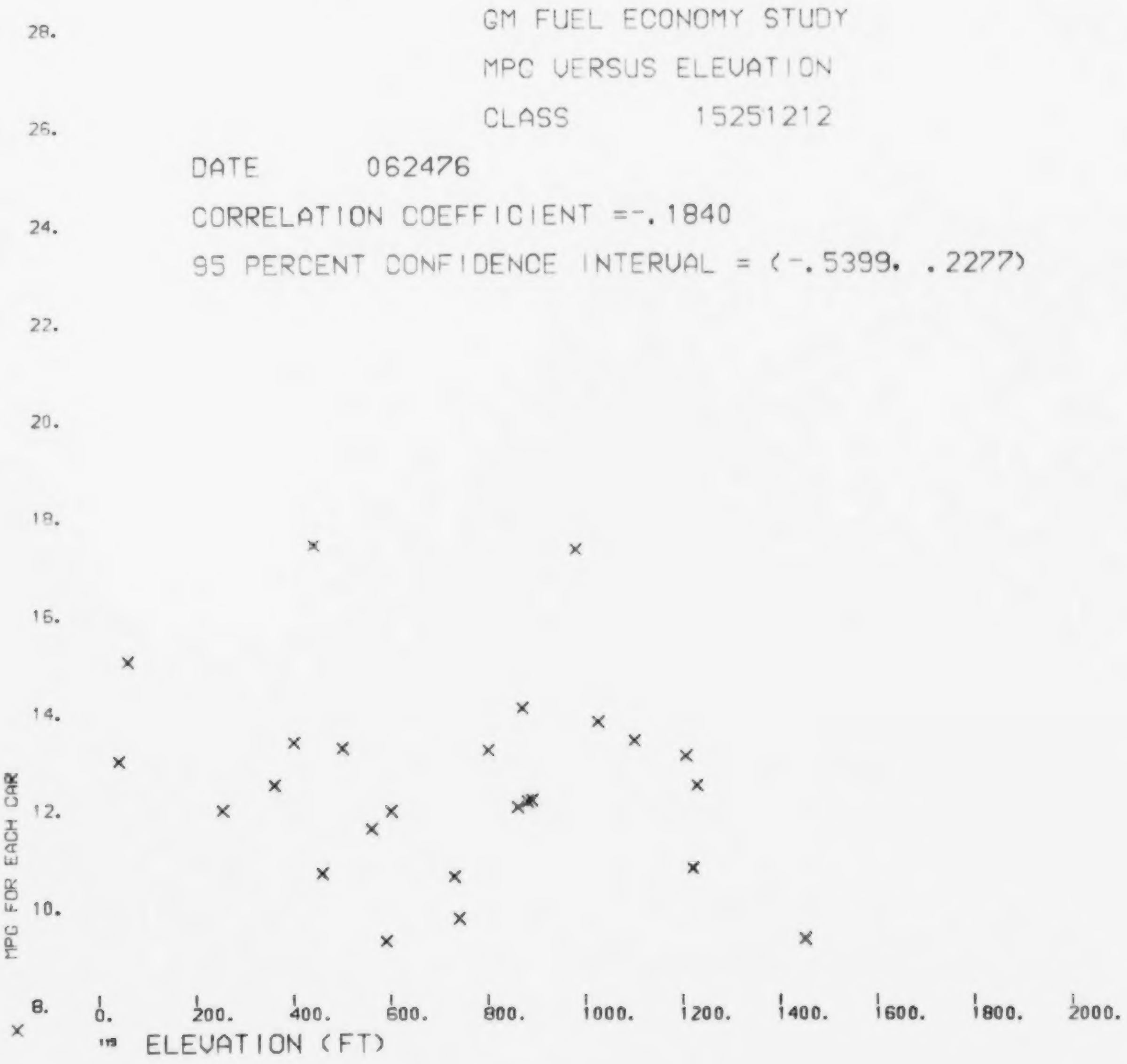
CORRELATION COEFFICIENT = .0955

95 PERCENT CONFIDENCE INTERVAL = (-.3114. .4728)



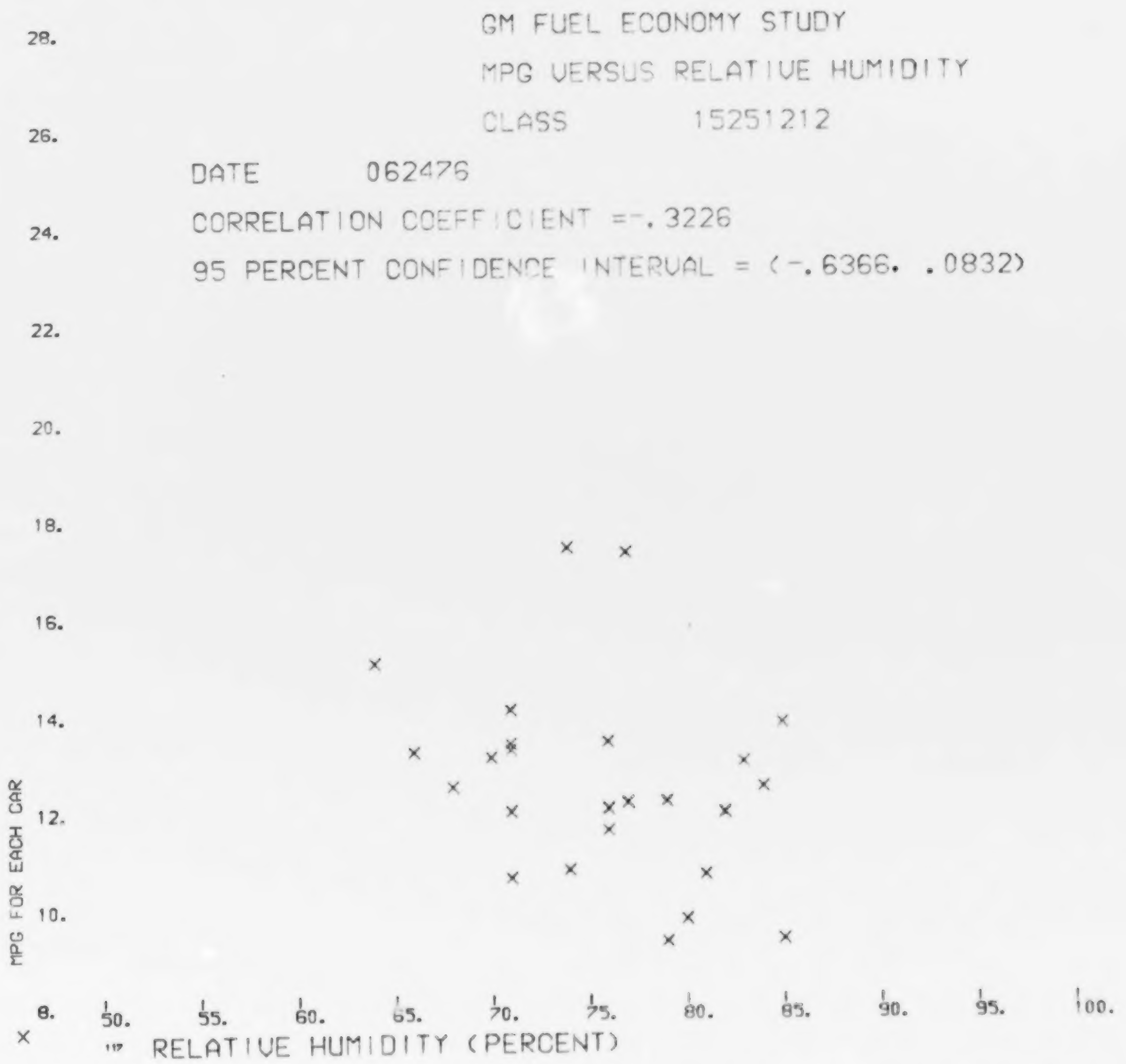
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 15251212

DATE 062476
CORRELATION COEFFICIENT = .0835
95 PERCENT CONFIDENCE INTERVAL = (-.3222. .4634)



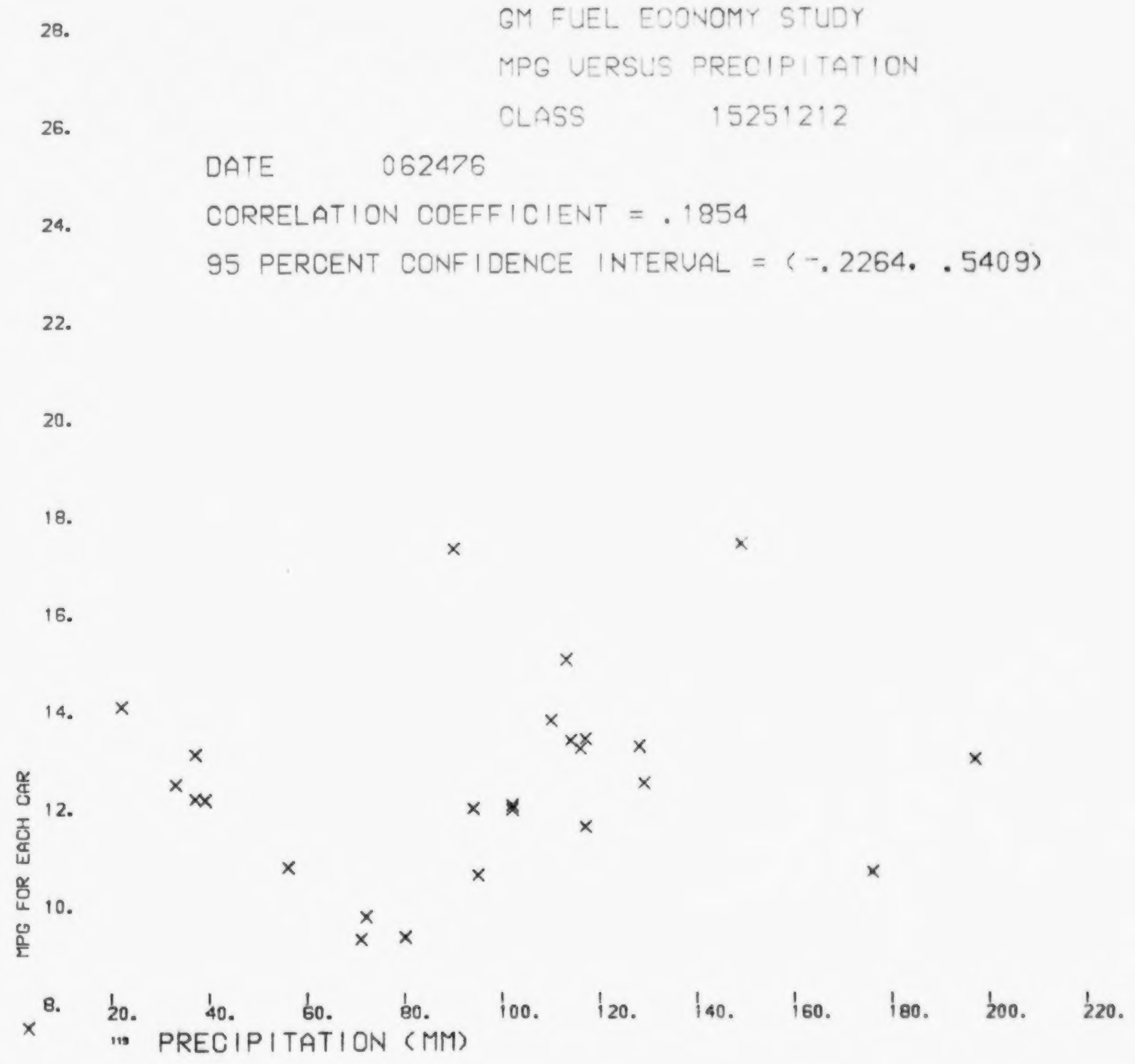
GM FUEL ECONOMY STUDY
MPC VERSUS ELEVATION
CLASS 15251212

DATE 062476
CORRELATION COEFFICIENT =-.1840
95 PERCENT CONFIDENCE INTERVAL = (-.5399. .2277)



GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 15251212

DATE 062476
CORRELATION COEFFICIENT =-.3226
95 PERCENT CONFIDENCE INTERVAL = (-.6366. .0832)

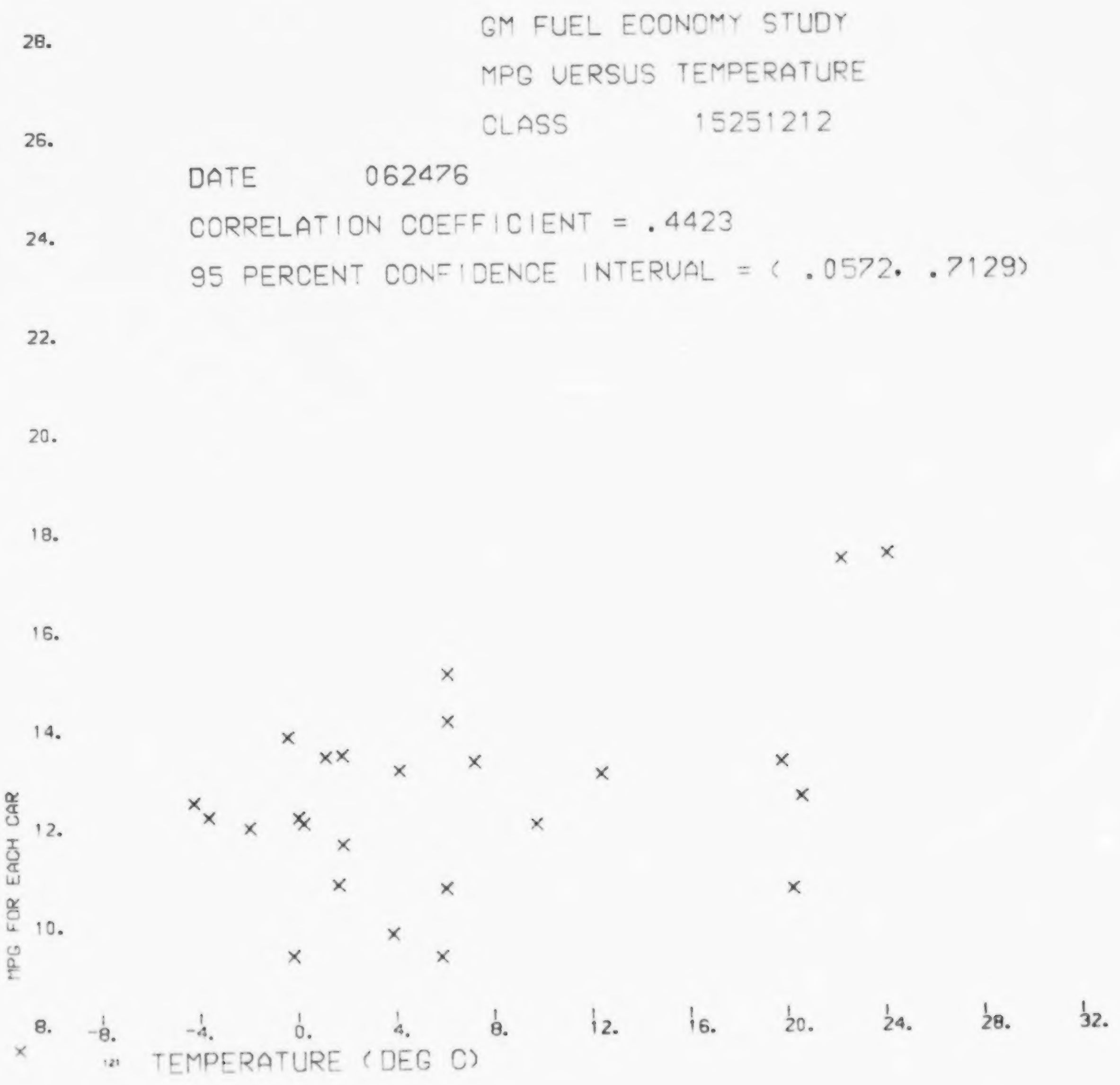


GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 15251212

DATE 062476

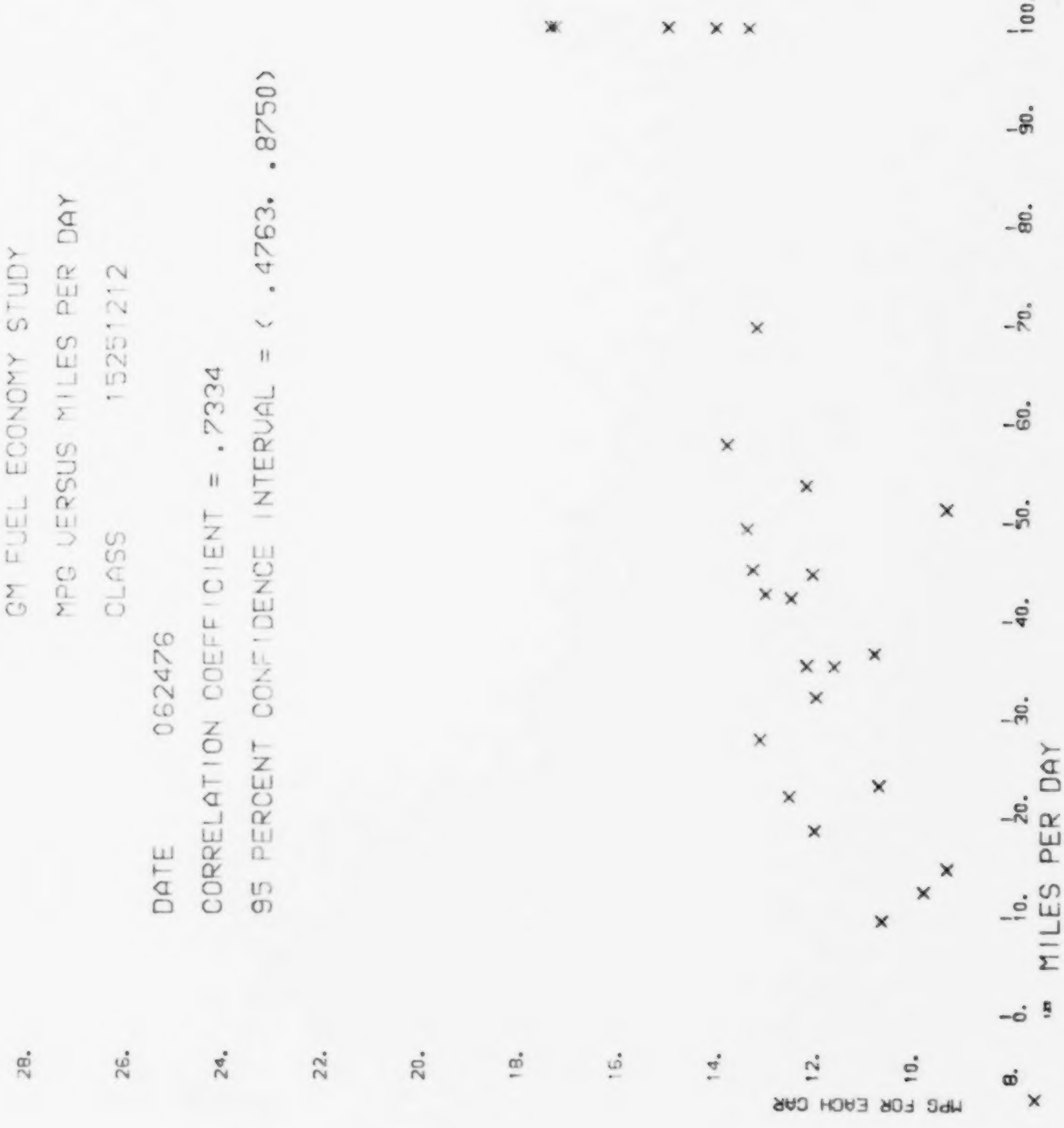
CORRELATION COEFFICIENT = .1854

95 PERCENT CONFIDENCE INTERVAL = (-.2264. .5409)



GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 15251212

DATE 062476
CORRELATION COEFFICIENT = .4423
95 PERCENT CONFIDENCE INTERVAL = (.0572. .7129)



GM FUEL ECONOMY STUDY

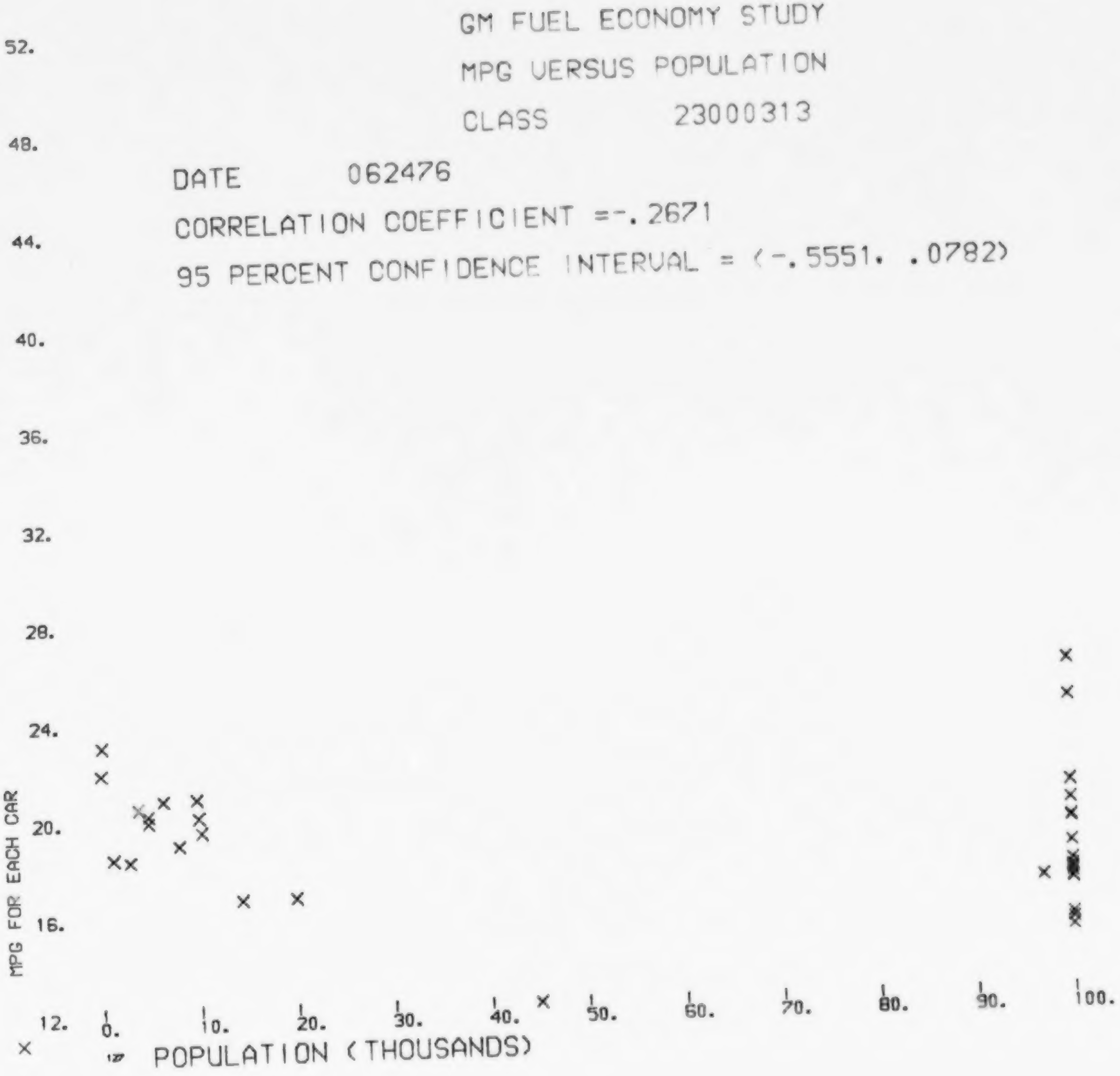
MPG VERSUS MILES PER DAY

CLASS 15251212

DATE 062476

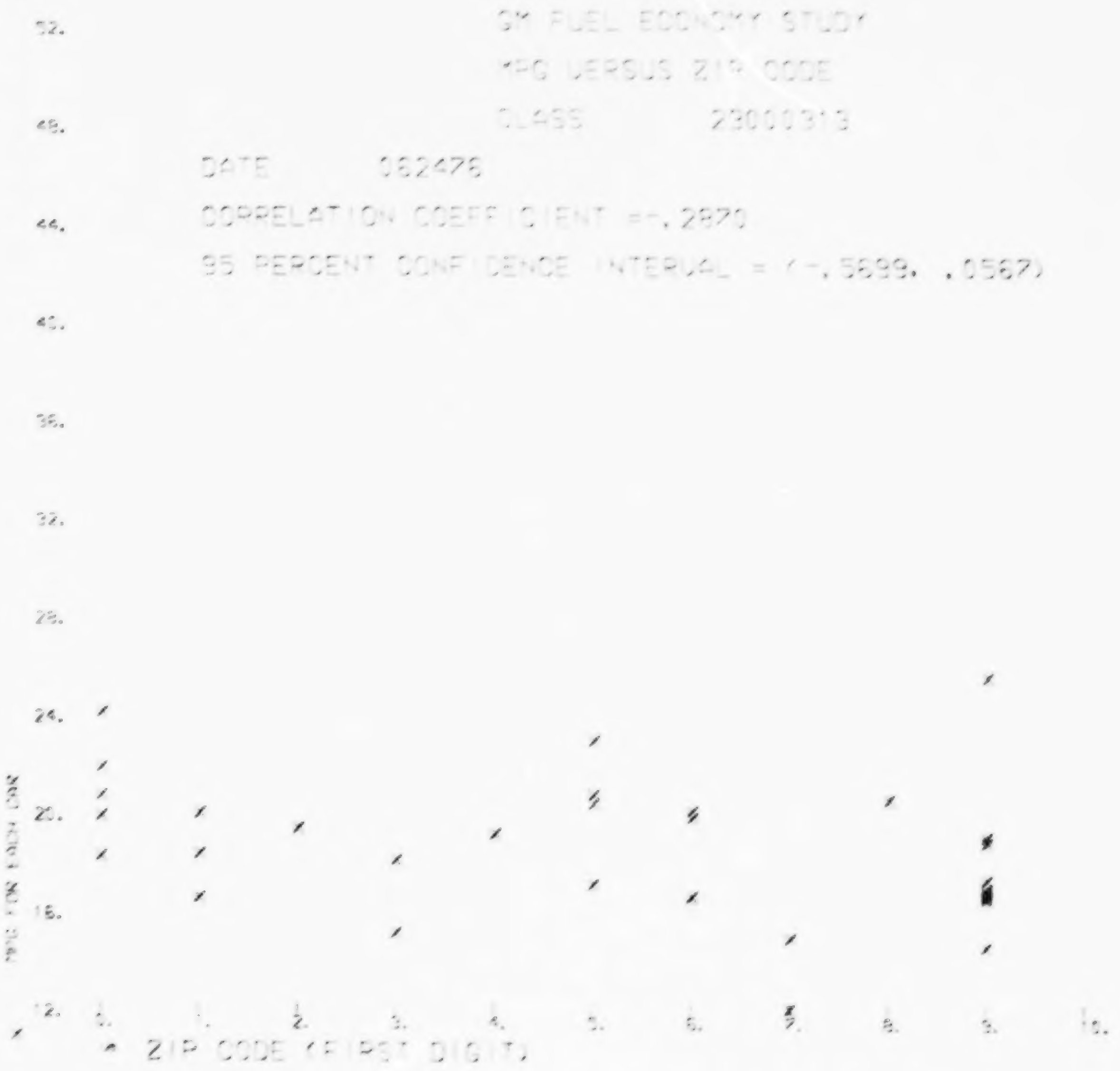
CORRELATION COEFFICIENT = .7334

95 PERCENT CONFIDENCE INTERVAL = (.4763, .8750)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 23000313

DATE 062476
CORRELATION COEFFICIENT =-.2671
95 PERCENT CONFIDENCE INTERVAL = (-.5551. .0782)

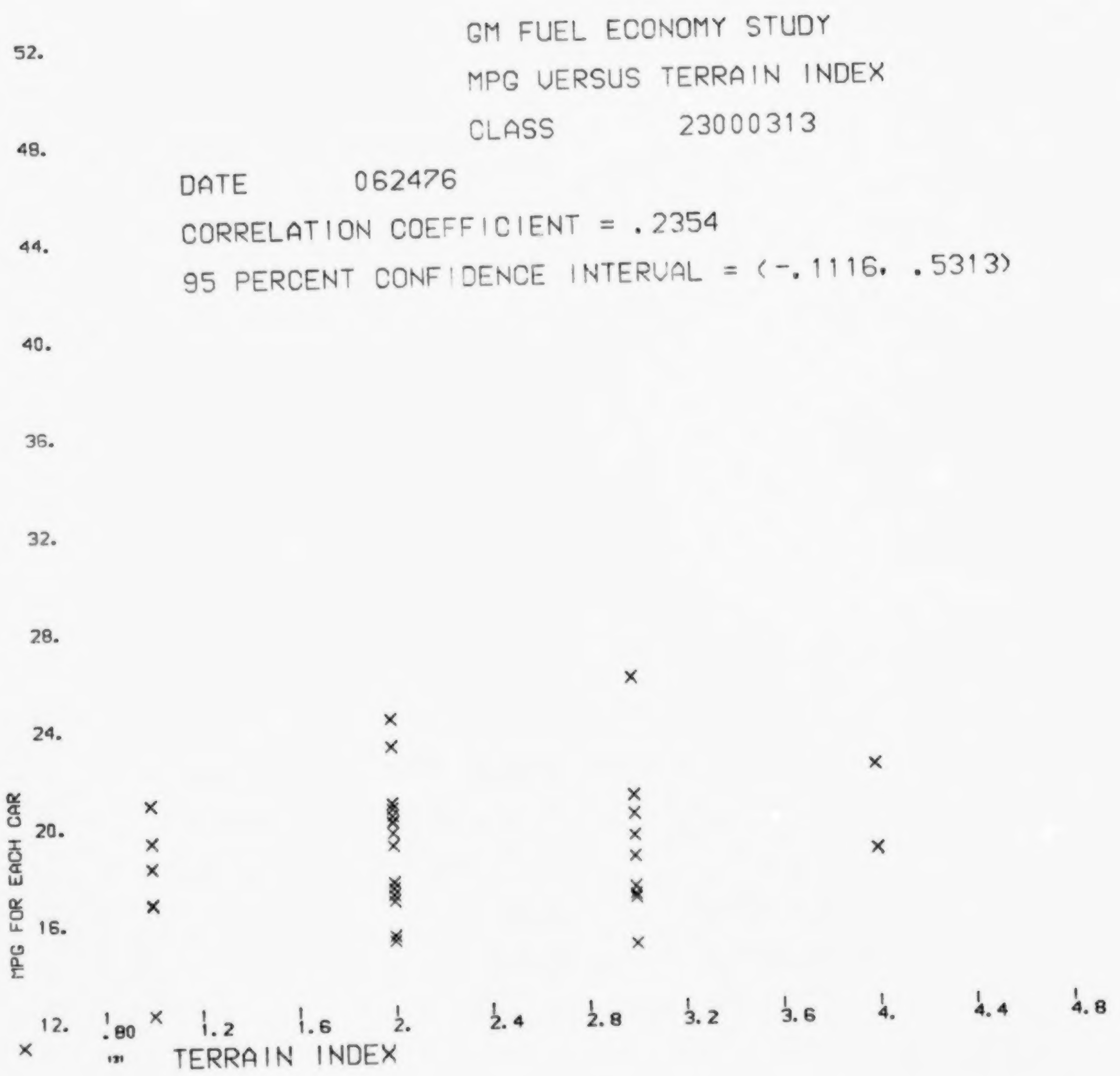


GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 23000313

DATE 062476

CORRELATION COEFFICIENT =-.2870

95 PERCENT CONFIDENCE INTERVAL = (-.5699, .0567)

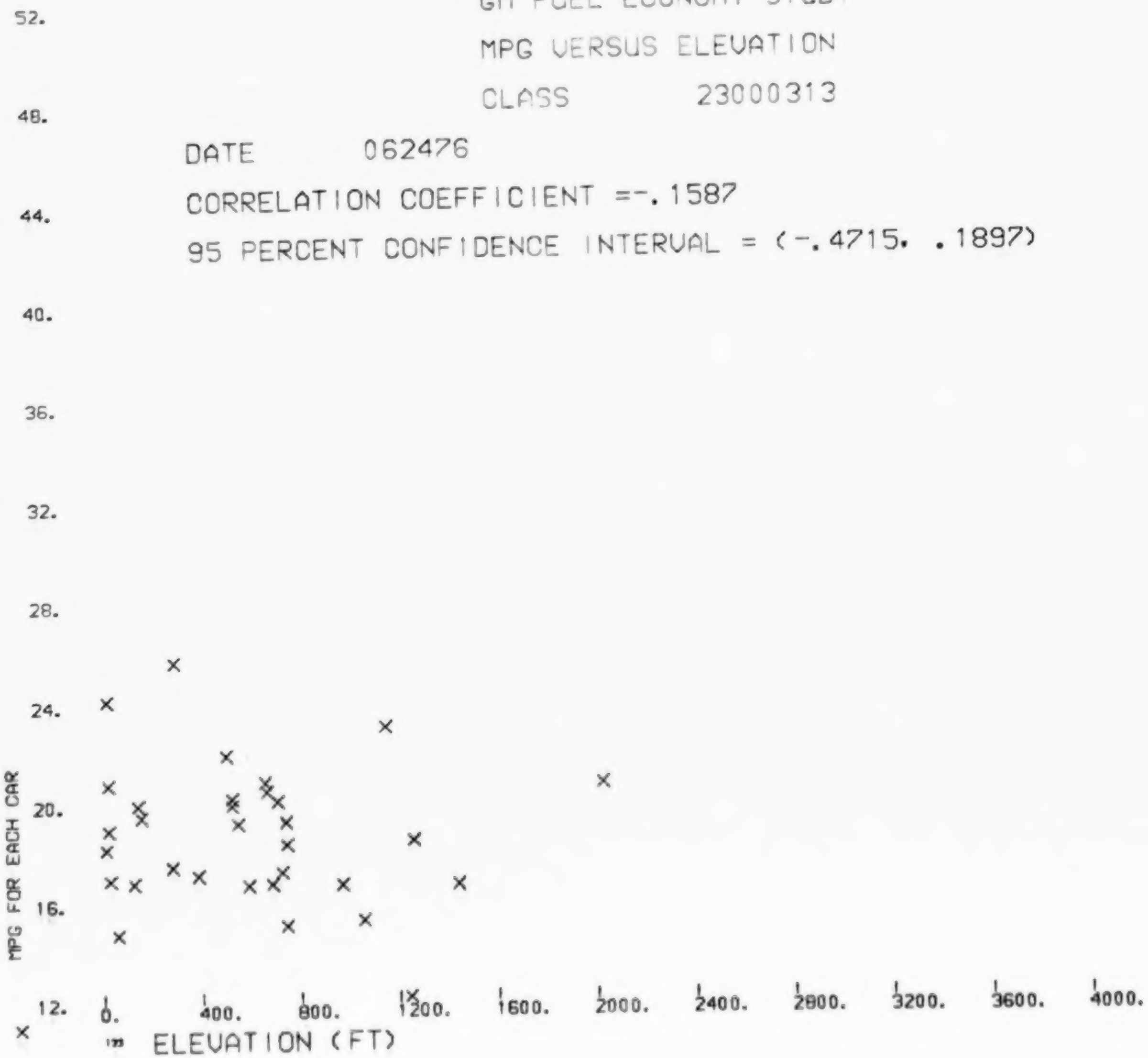


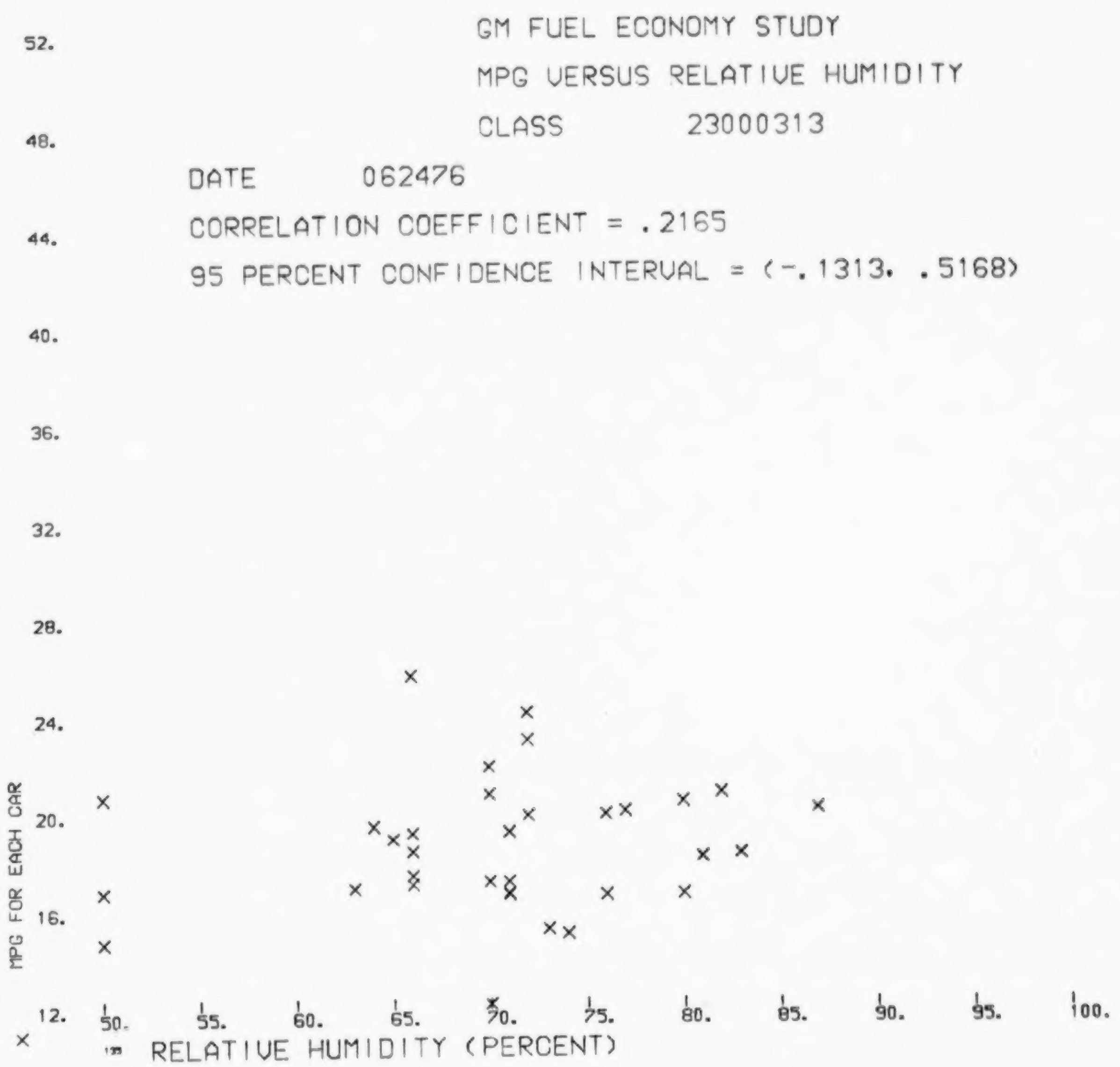
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 23000313

DATE 062476
CORRELATION COEFFICIENT = .2354
95 PERCENT CONFIDENCE INTERVAL = (-.1116, .5313)

GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 23000313

DATE 062476
CORRELATION COEFFICIENT =-.1587
95 PERCENT CONFIDENCE INTERVAL = (-.4715. .1897)

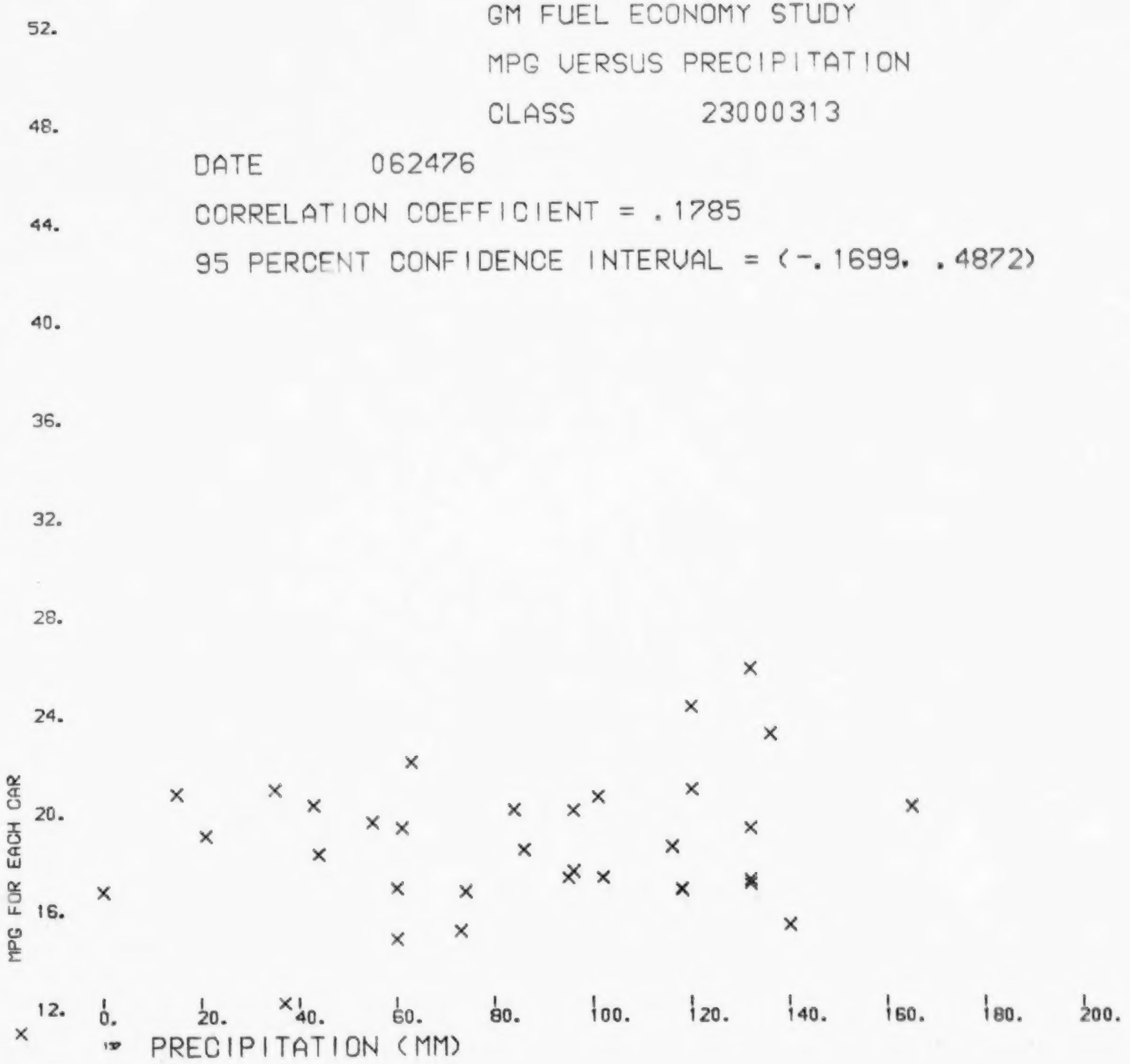


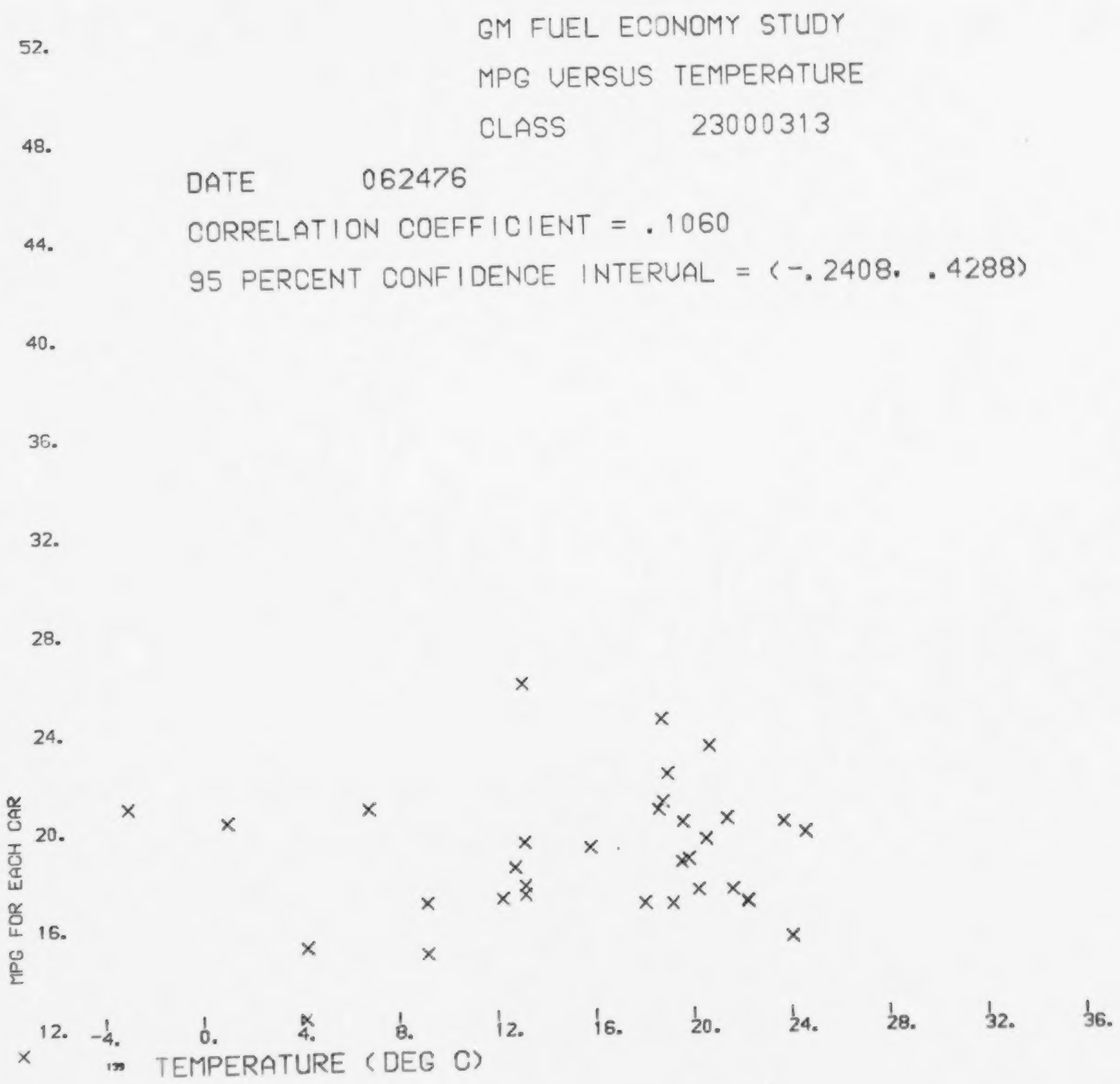


GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 23000313

DATE 062476
CORRELATION COEFFICIENT = .2165
95 PERCENT CONFIDENCE INTERVAL = (-.1313. .5168)

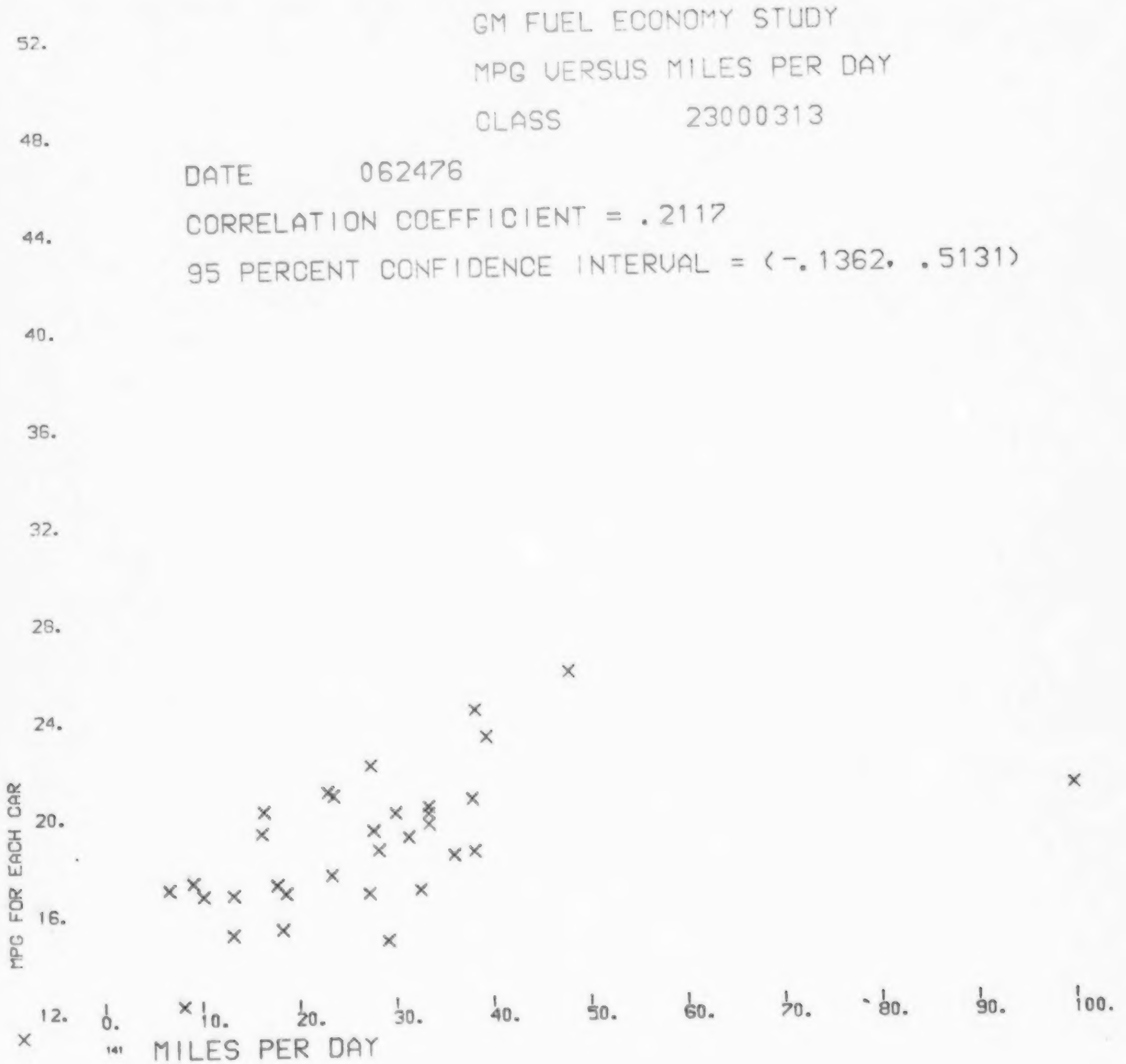
GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 23000313
DATE 062476
CORRELATION COEFFICIENT = .1785
95 PERCENT CONFIDENCE INTERVAL = (-.1699. .4872)





GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 23000313

DATE 062476
CORRELATION COEFFICIENT = .1060
95 PERCENT CONFIDENCE INTERVAL = (-.2408. .4288)


GM FUEL ECONOMY STUDY

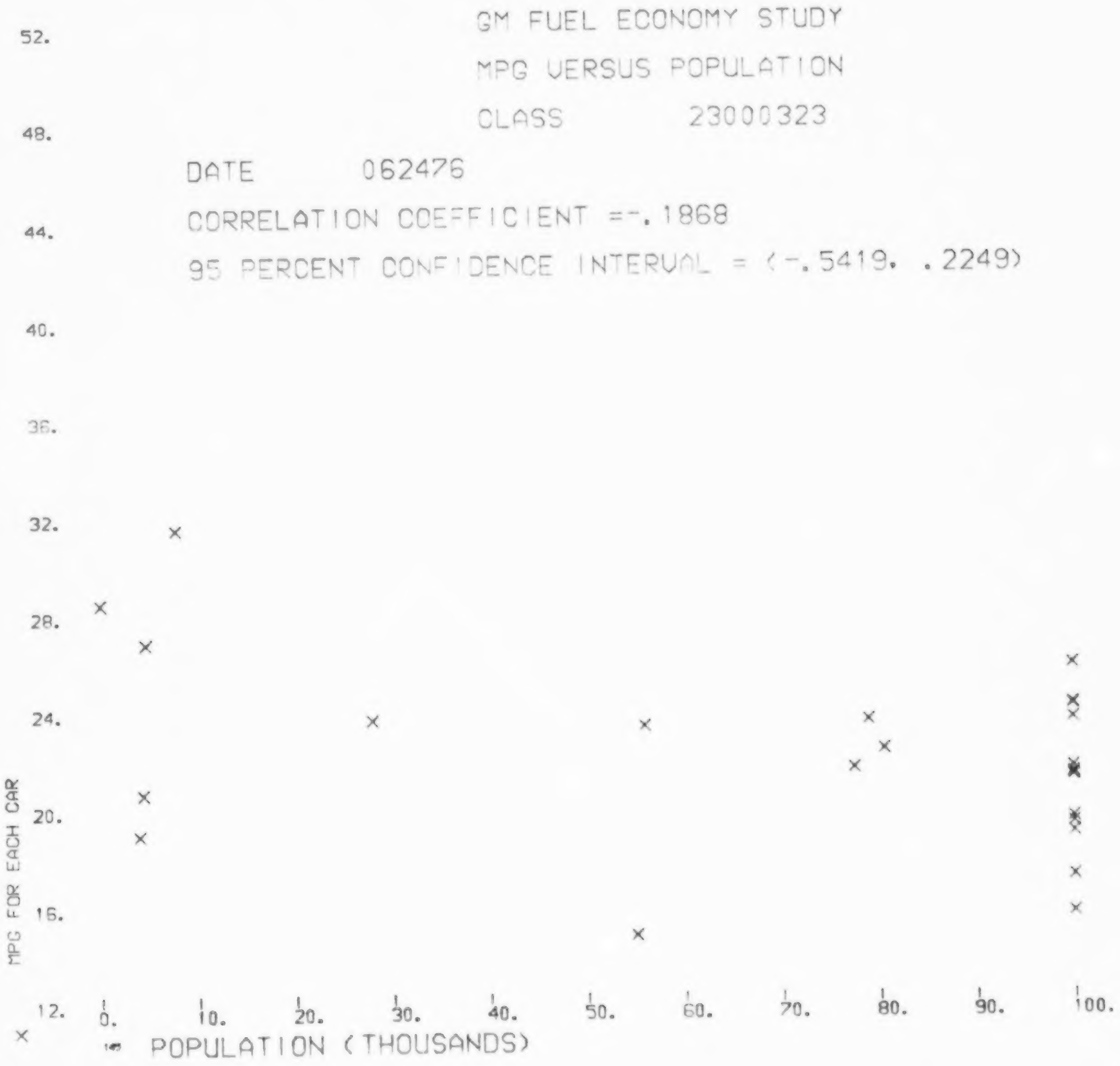
MPG VERSUS MILES PER DAY

CLASS 23000313

DATE 062476

CORRELATION COEFFICIENT = .2117

95 PERCENT CONFIDENCE INTERVAL = (-.1362, .5131)

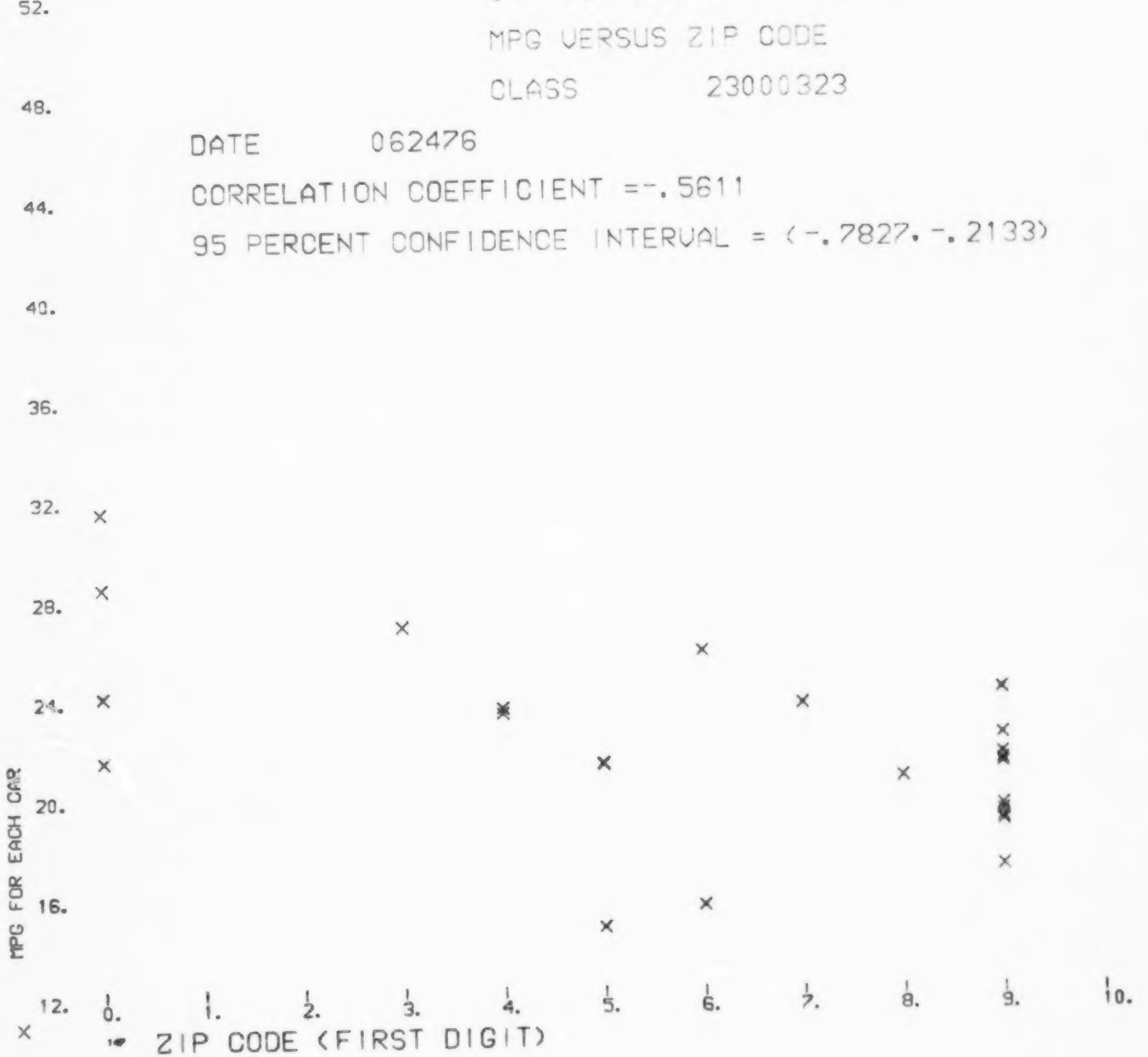


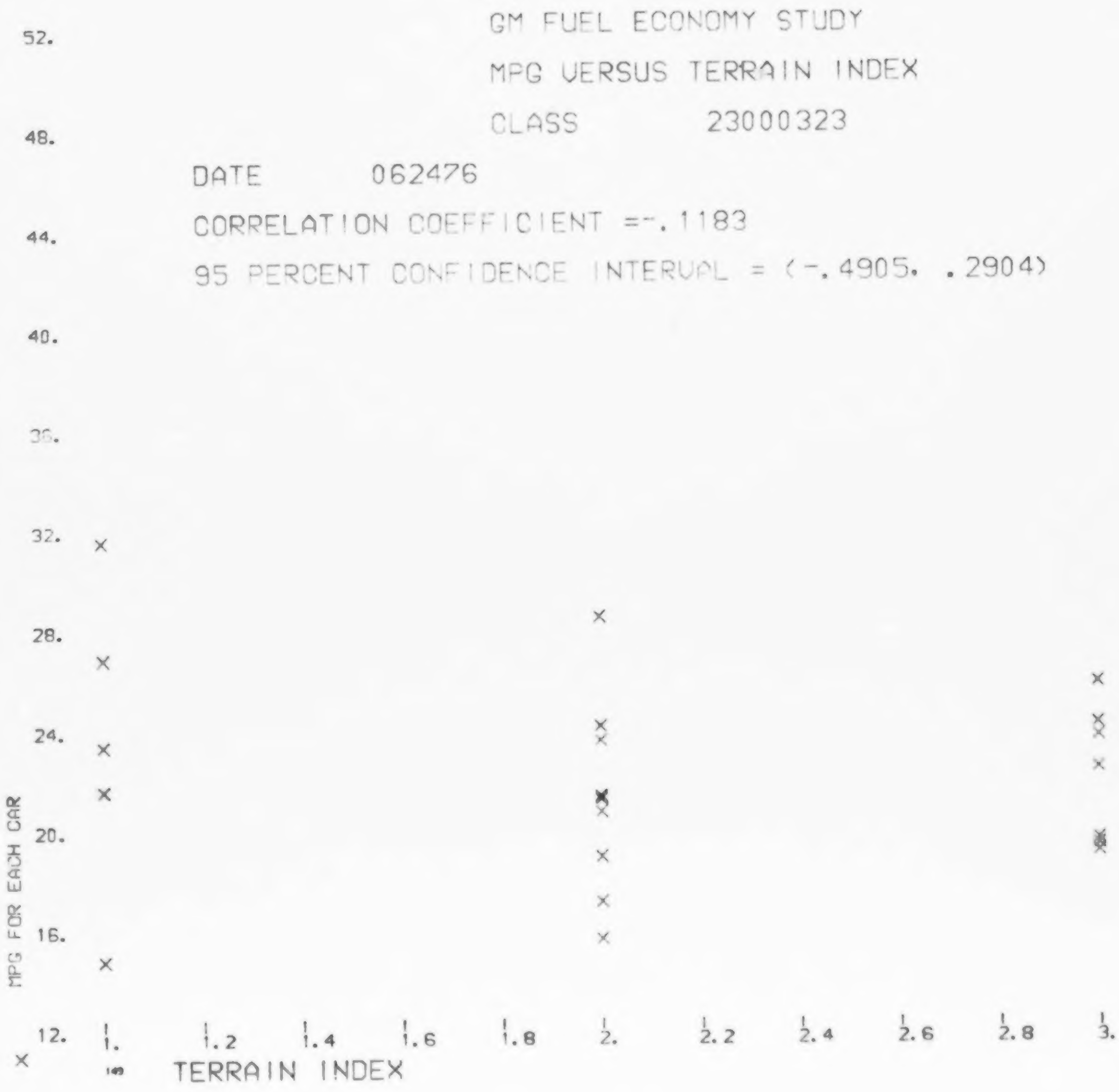
GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 23000323

DATE 062476
CORRELATION COEFFICIENT =-.1868
95 PERCENT CONFIDENCE INTERVAL = (-.5419, .2249)

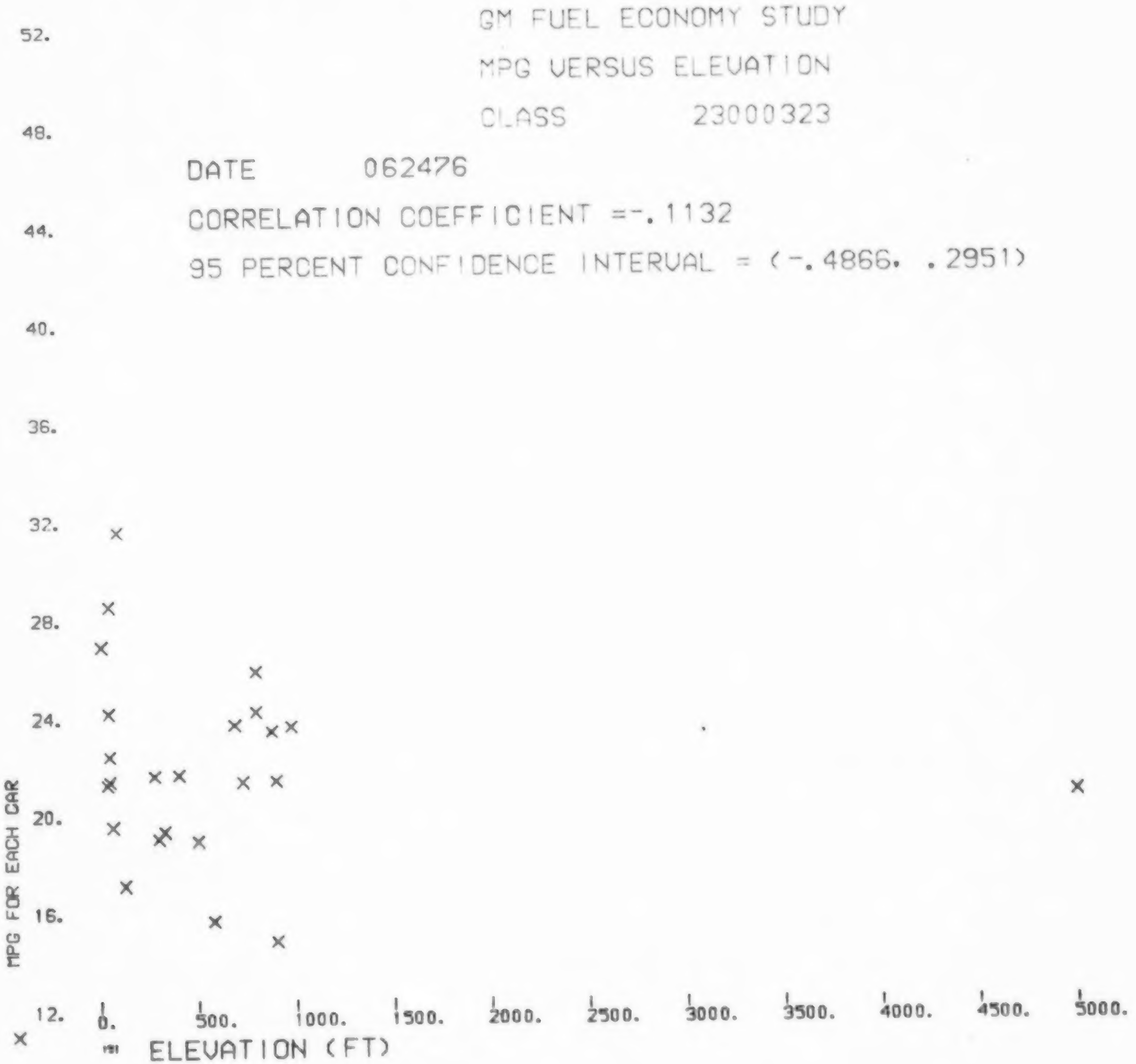
GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 23000323

DATE 062476
CORRELATION COEFFICIENT =-.5611
95 PERCENT CONFIDENCE INTERVAL = (-.7827,-.2133)



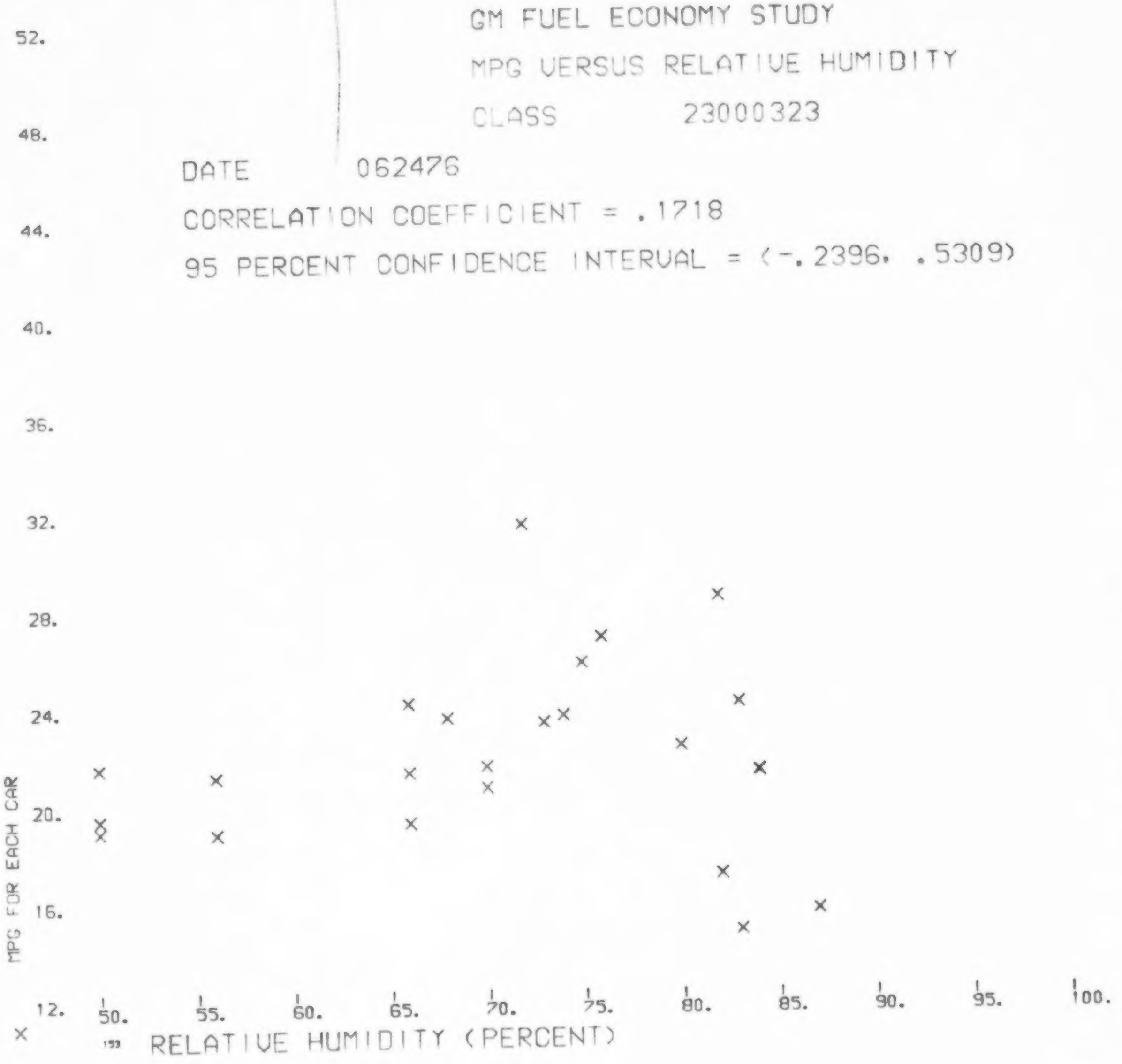


GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 23000323
DATE 062476
CORRELATION COEFFICIENT =-.1183
95 PERCENT CONFIDENCE INTERVAL = (-.4905, .2904)



GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 23000323

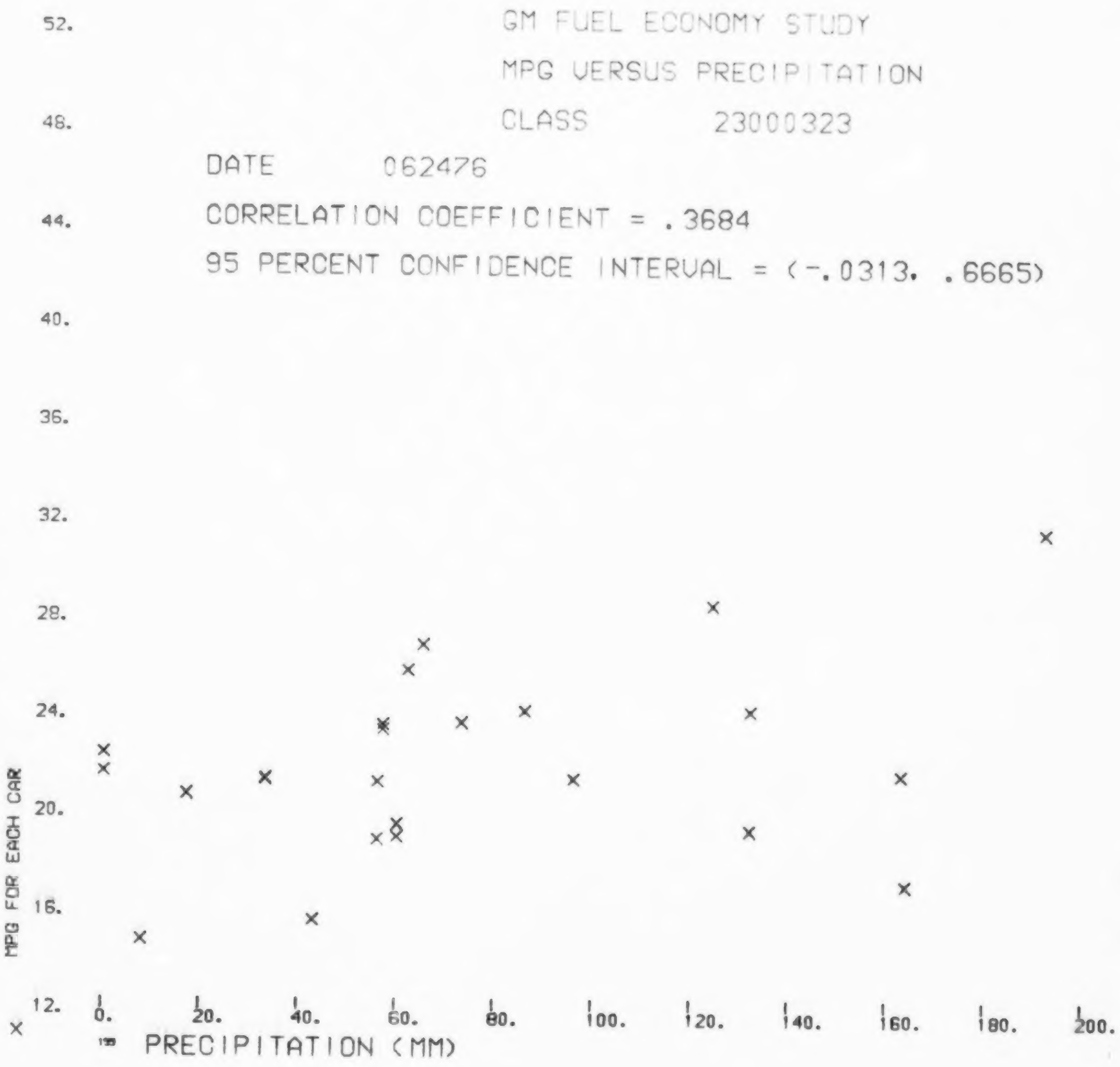
DATE 062476
CORRELATION COEFFICIENT =-.1132
95 PERCENT CONFIDENCE INTERVAL = (-.4866. .2951)

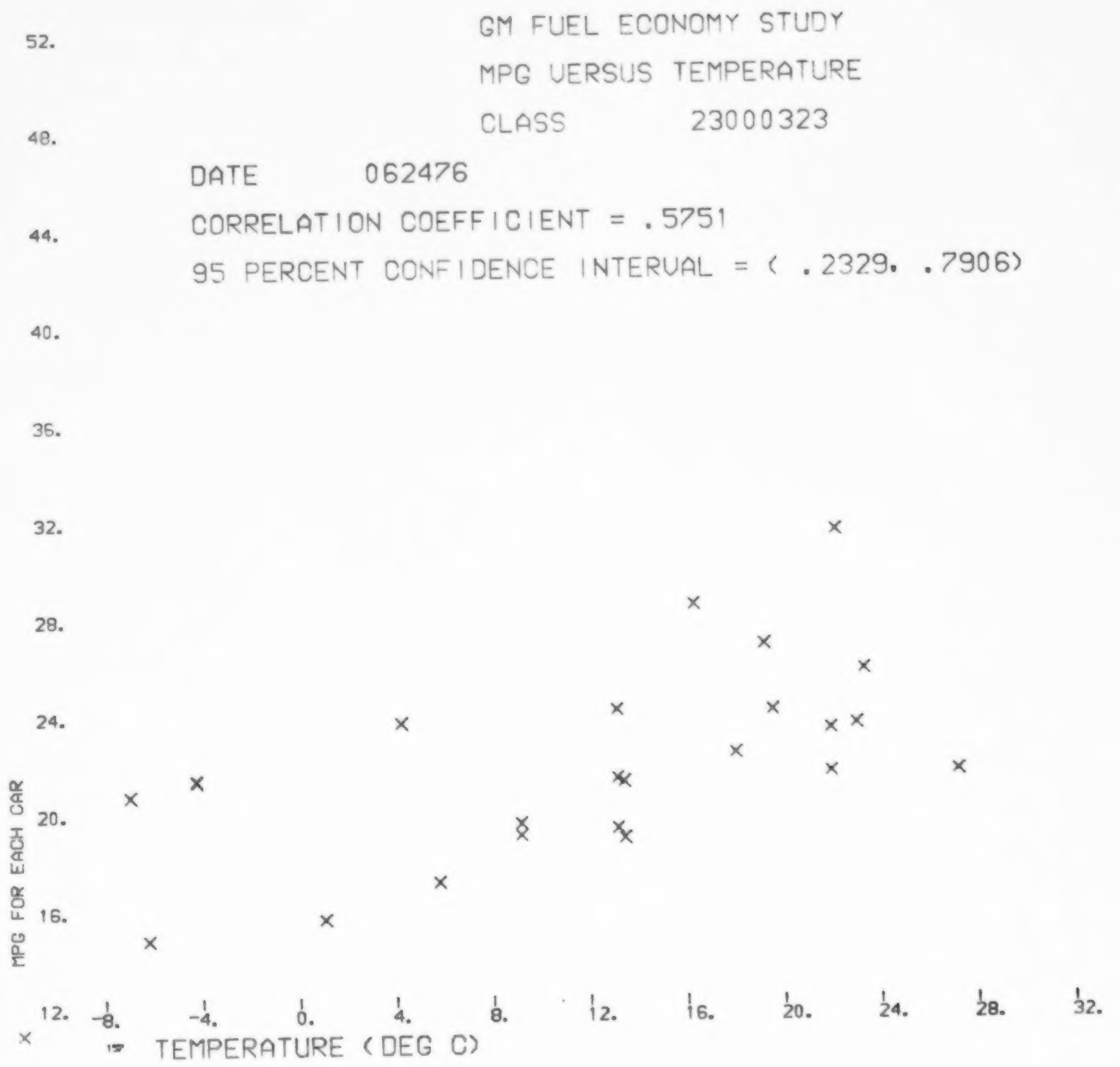


GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 23000323

DATE 062476
CORRELATION COEFFICIENT = .1718
95 PERCENT CONFIDENCE INTERVAL = (-.2396, .5309)

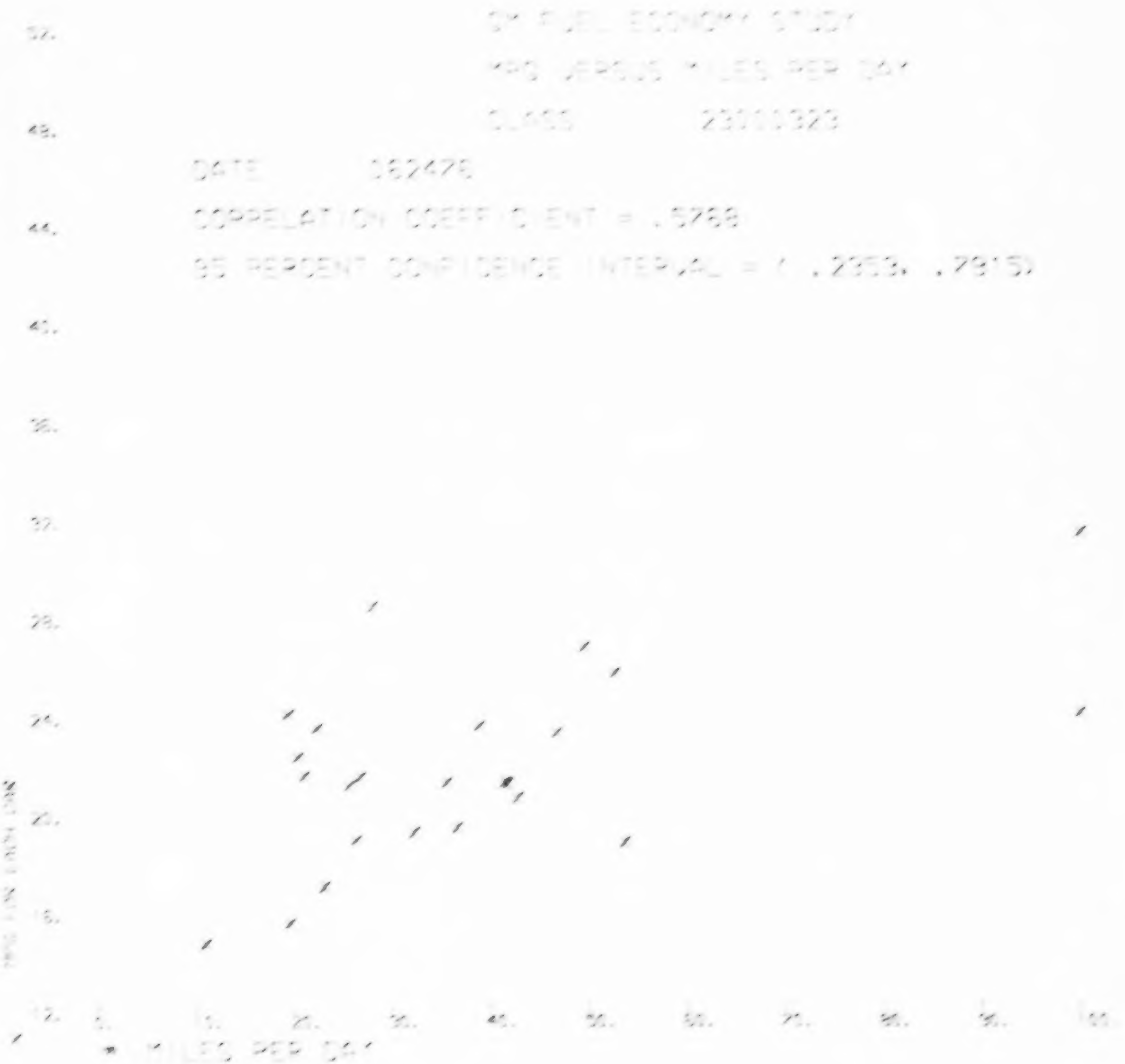
GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 23000323
DATE 062476
CORRELATION COEFFICIENT = .3684
95 PERCENT CONFIDENCE INTERVAL = (-.0313. .6665)



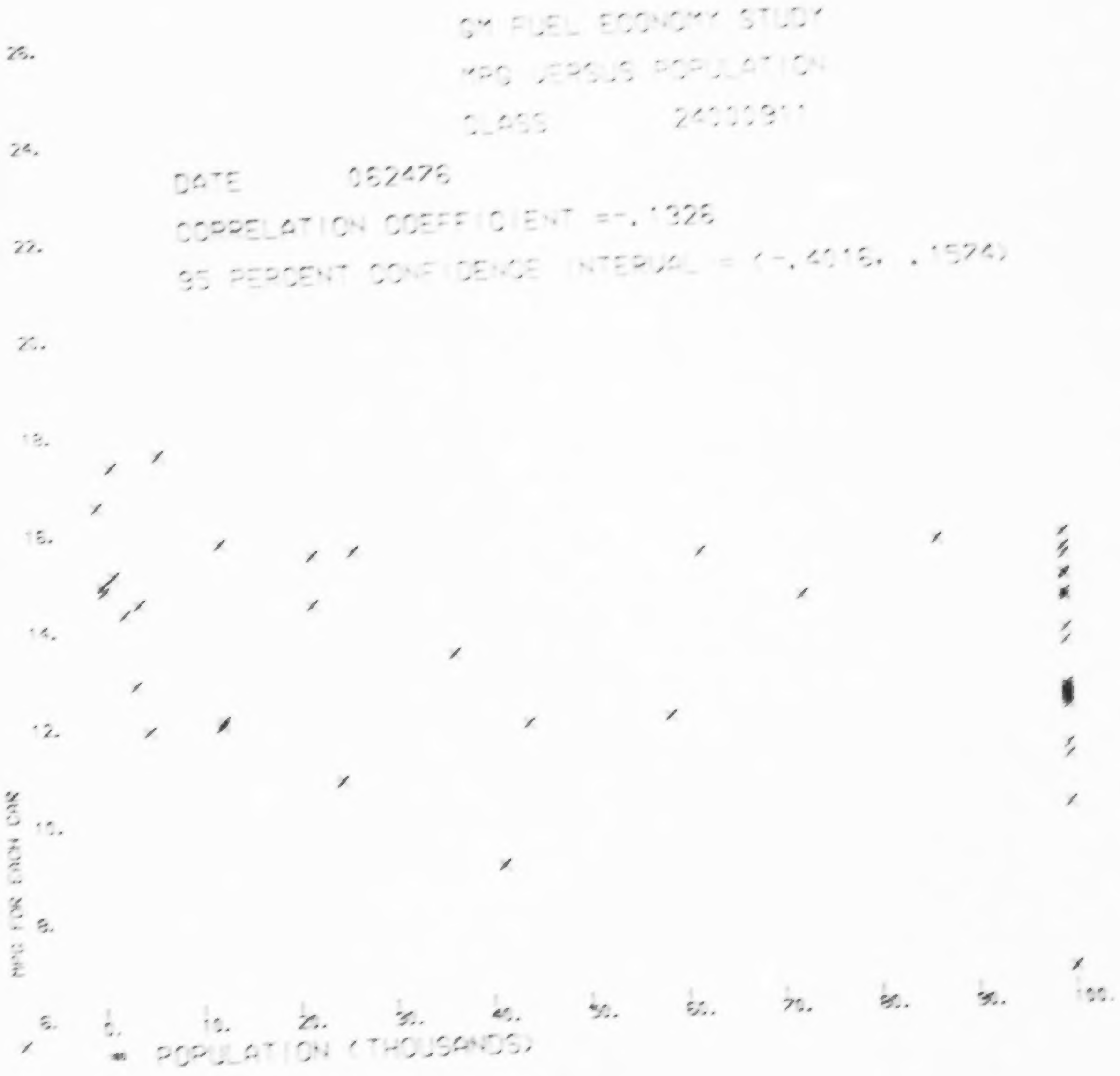


GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 23000323

DATE 062476
CORRELATION COEFFICIENT = .5751
95 PERCENT CONFIDENCE INTERVAL = (.2329. .7906)

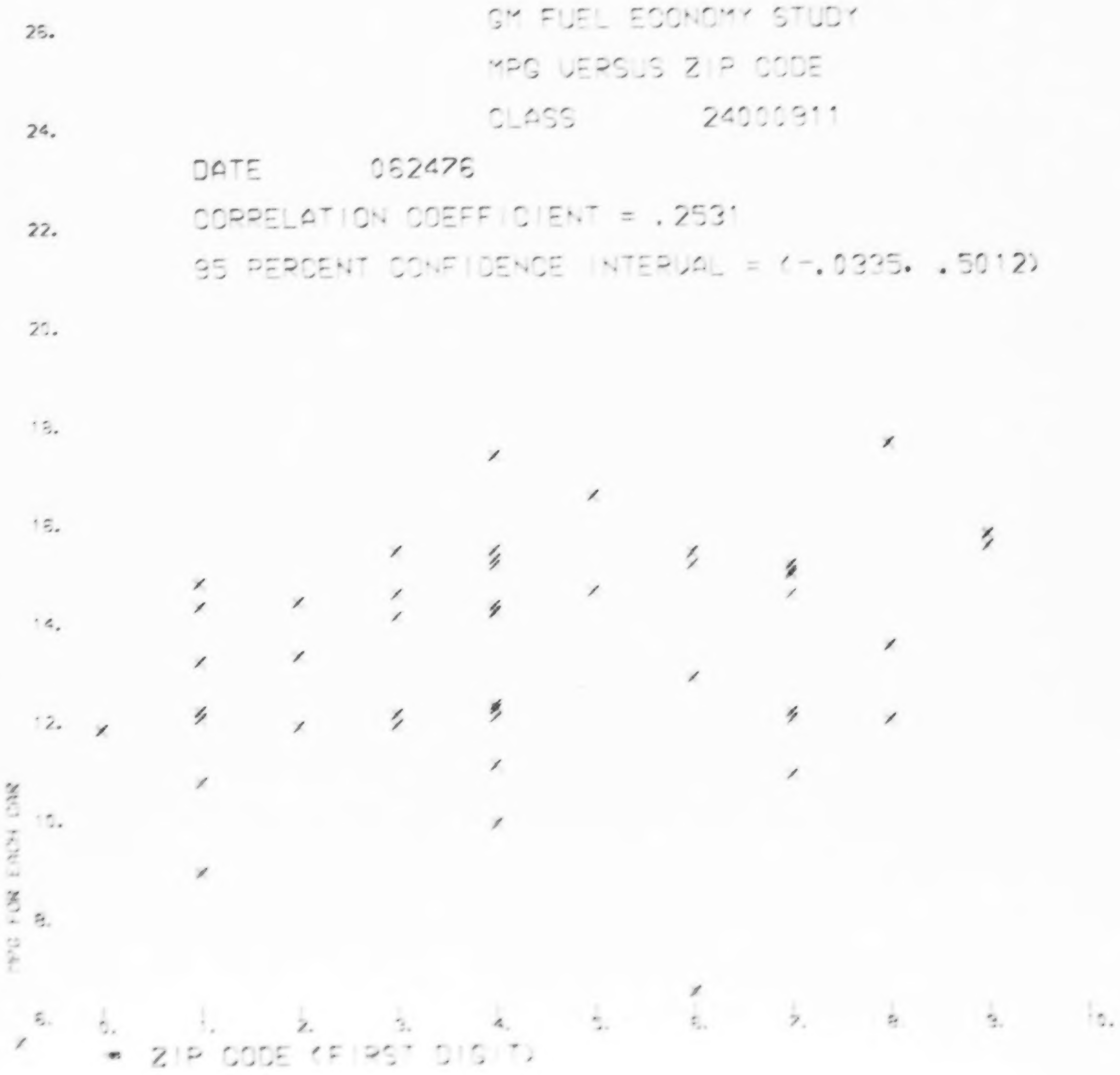


GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 23010323
DATE 062476
CORRELATION COEFFICIENT = .5768
95 PERCENT CONFIDENCE INTERVAL = (.2353, .7915)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 24000911

DATE 062476
CORRELATION COEFFICIENT =-.1326
95 PERCENT CONFIDENCE INTERVAL = (-.4016, .1574)



GM FUEL ECONOMY STUDY

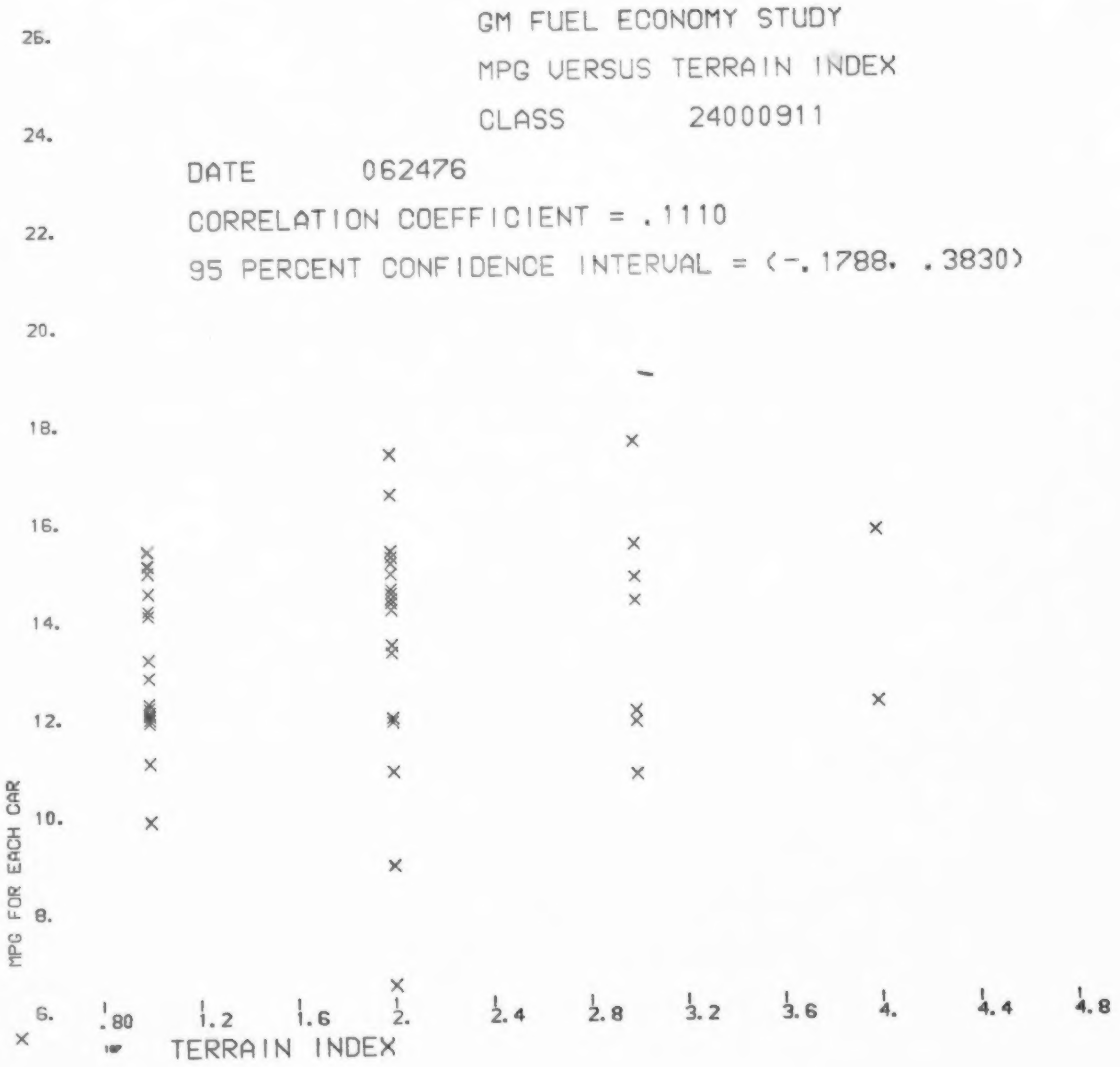
MPG VERSUS ZIP CODE

CLASS 24000911

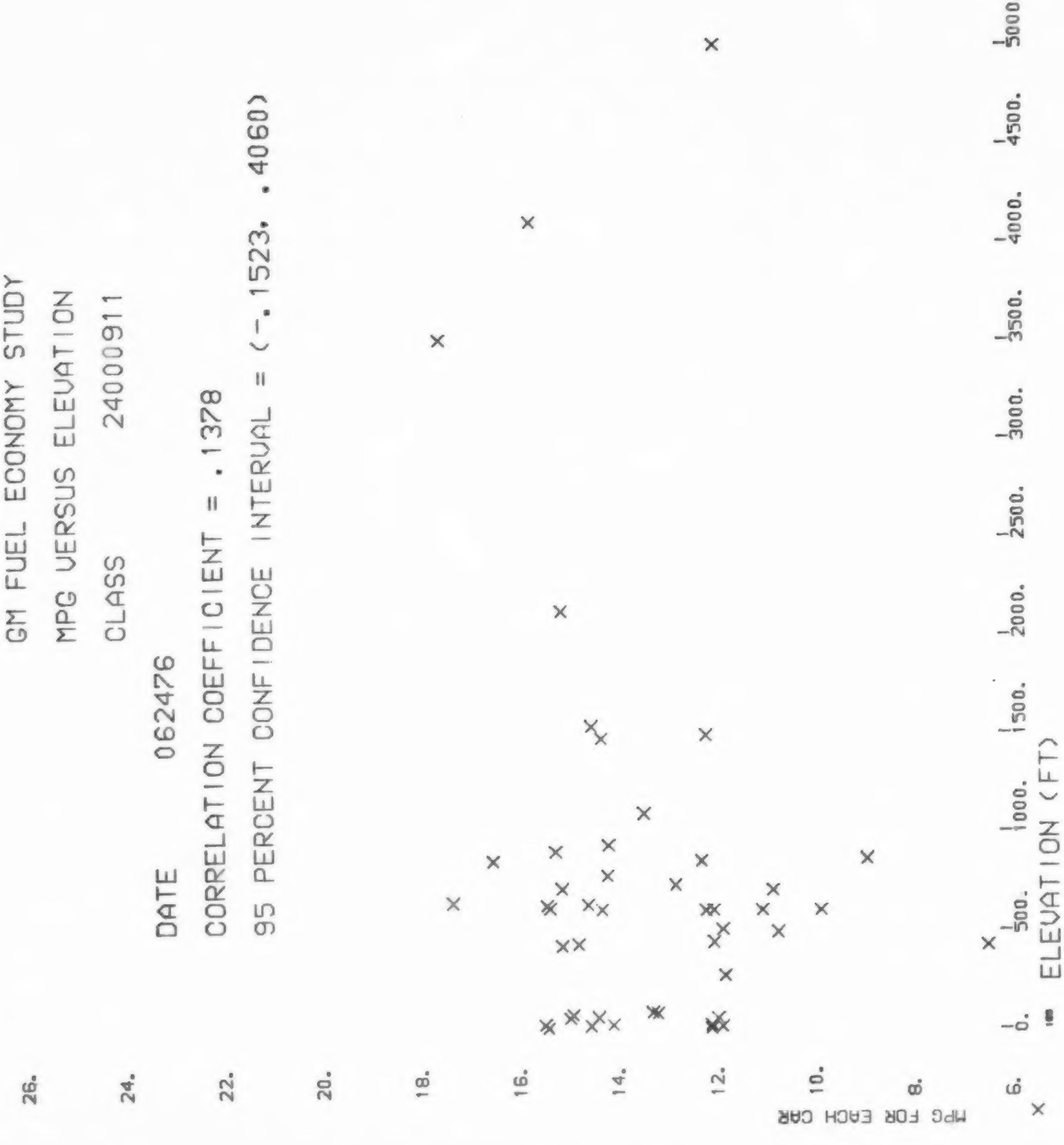
DATE 062476

CORRELATION COEFFICIENT = .2531

95 PERCENT CONFIDENCE INTERVAL = (-.0335, .5012)

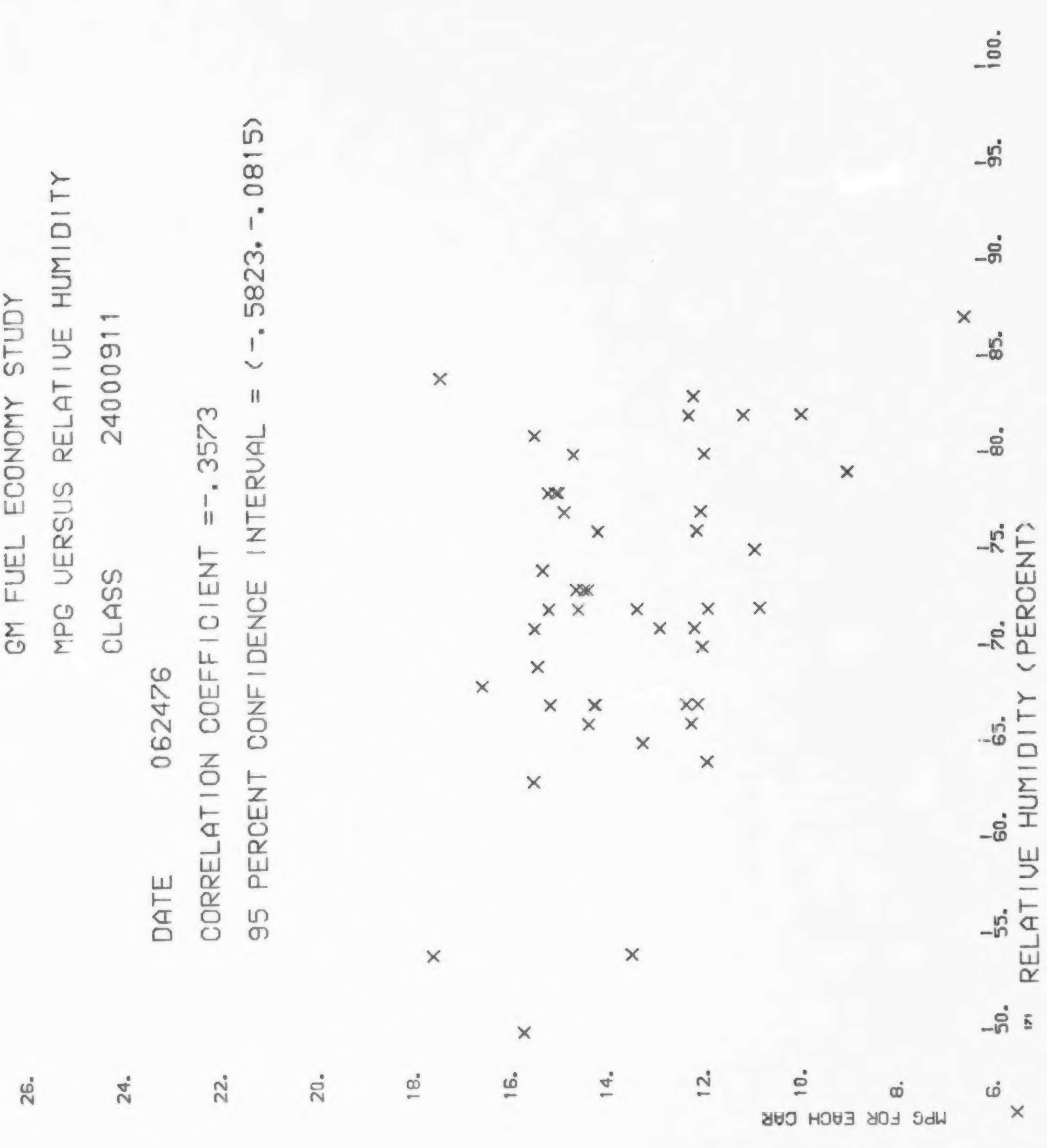


GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 24000911
DATE 062476
CORRELATION COEFFICIENT = .1110
95 PERCENT CONFIDENCE INTERVAL = (-.1788, .3830)



GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 24000911

DATE 062476
CORRELATION COEFFICIENT = .1378
95 PERCENT CONFIDENCE INTERVAL = (-.1523, .4060)



GM FUEL ECONOMY STUDY

MPG VERSUS RELATIVE HUMIDITY

CLASS 24000911

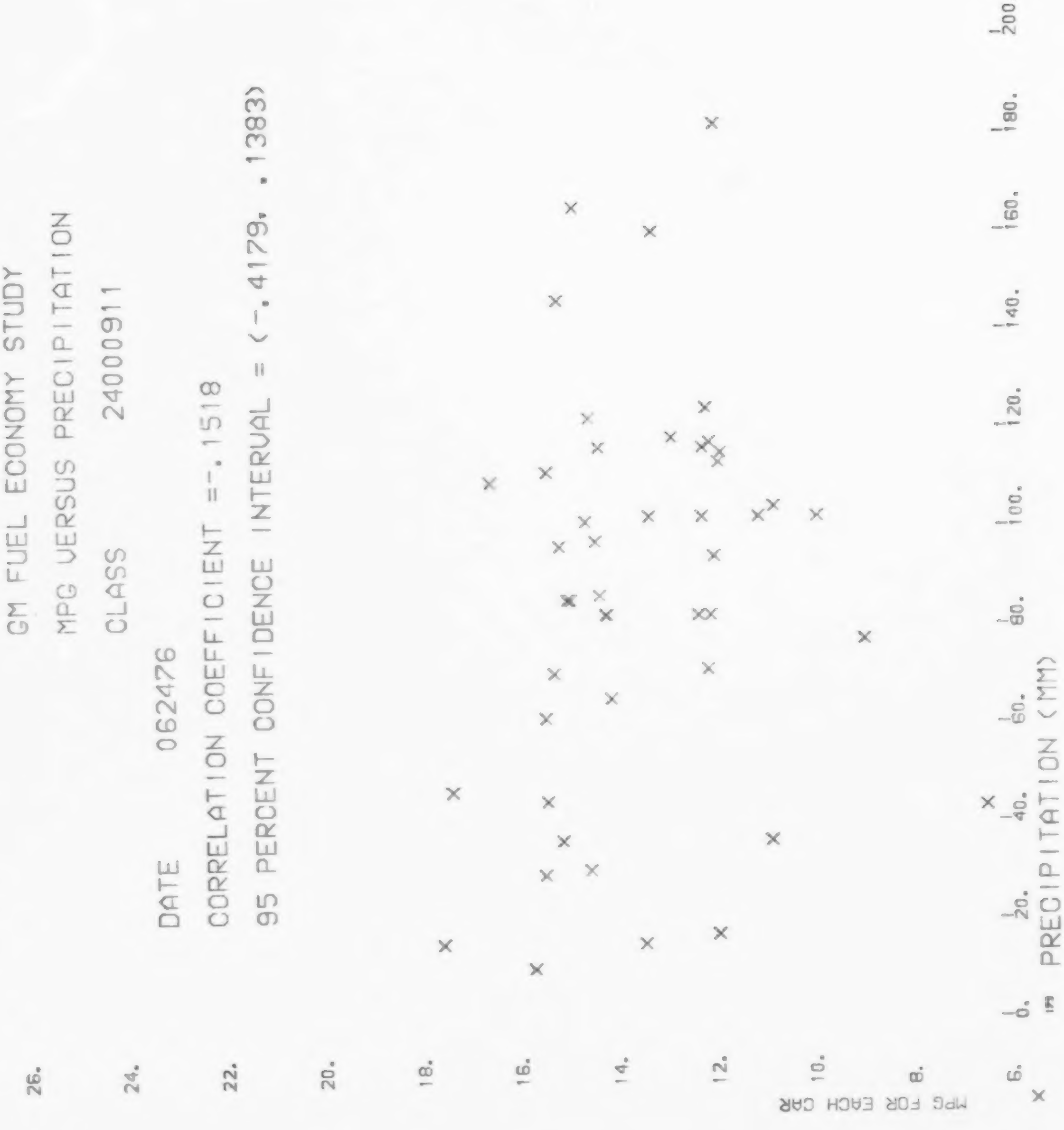
DATE 062476

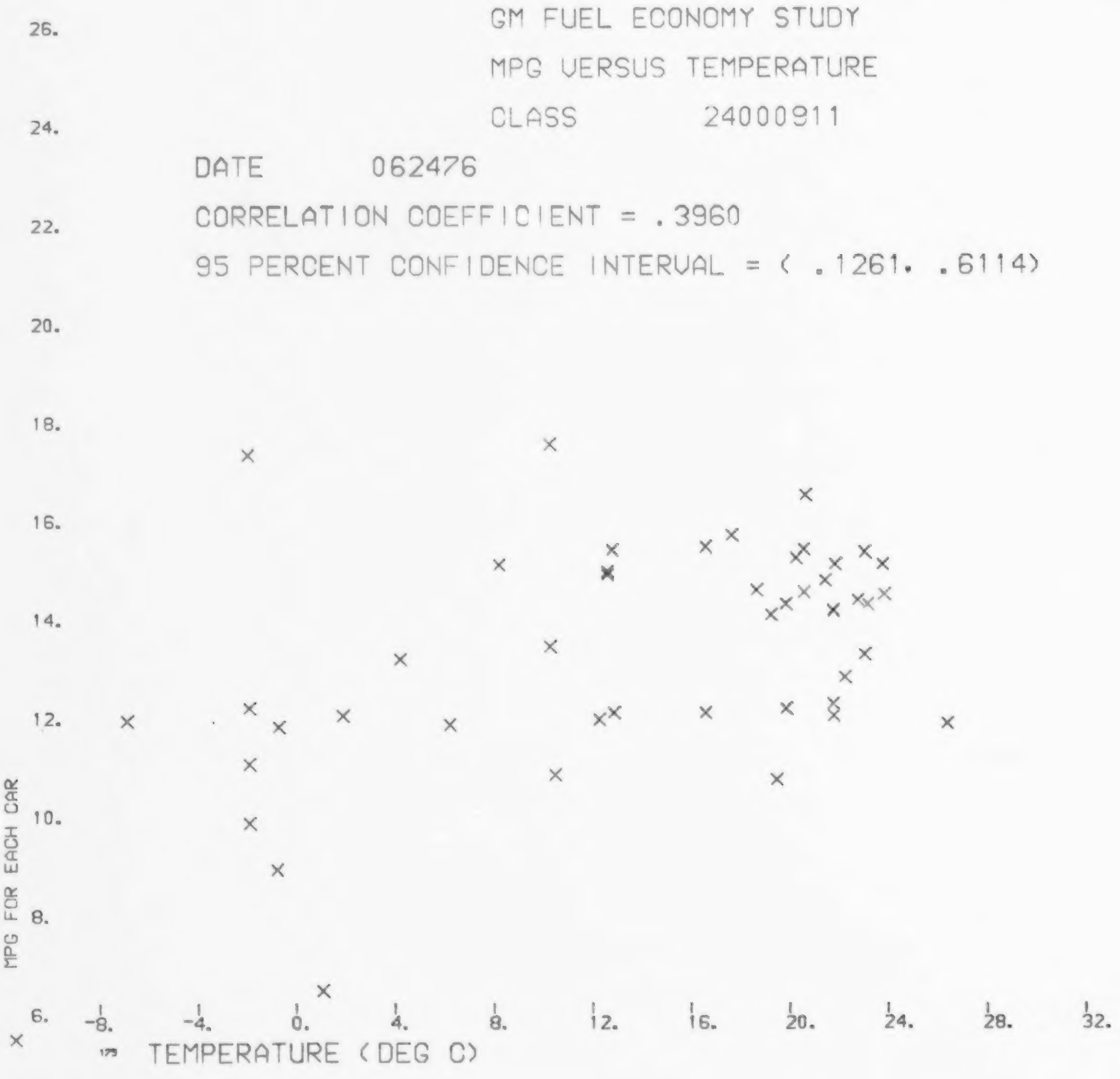
CORRELATION COEFFICIENT =-.3573

95 PERCENT CONFIDENCE INTERVAL = (-.5823, -.0815)

GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 24000911

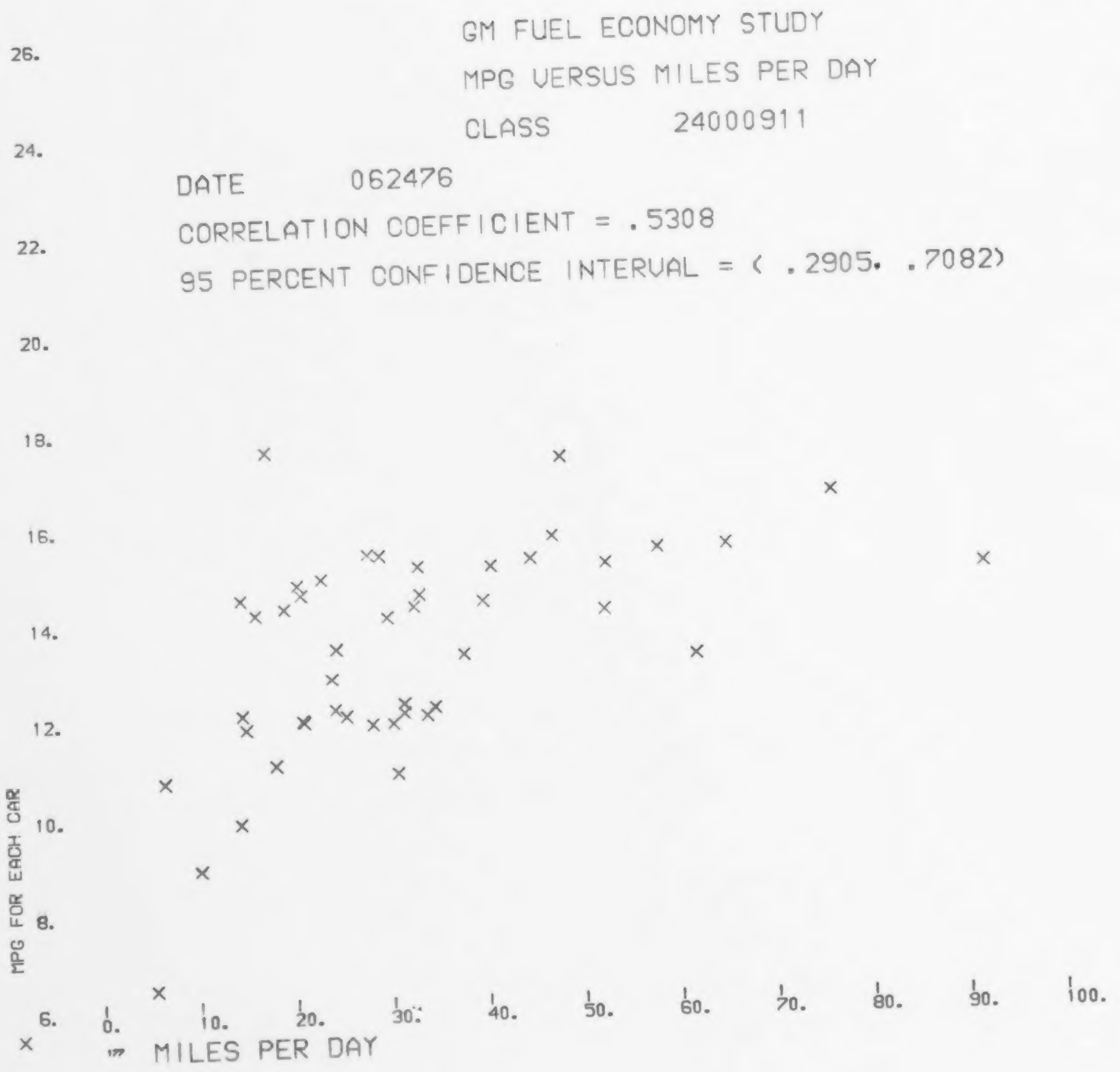
DATE 062476
CORRELATION COEFFICIENT =-.1518
95 PERCENT CONFIDENCE INTERVAL = (-.4179, .1383)





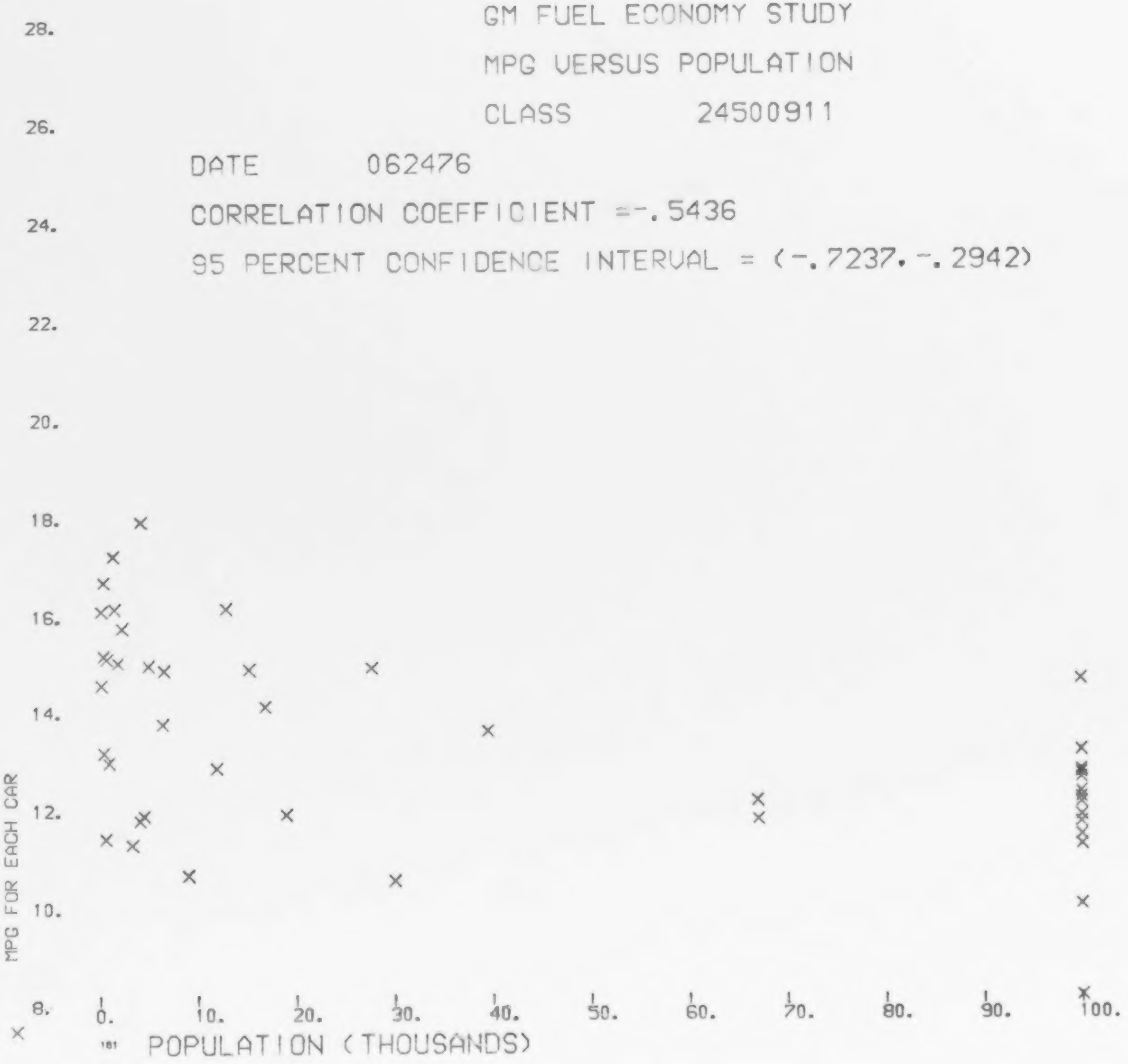
GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 24000911

DATE 062476
CORRELATION COEFFICIENT = .3960
95 PERCENT CONFIDENCE INTERVAL = (.1261. .6114)



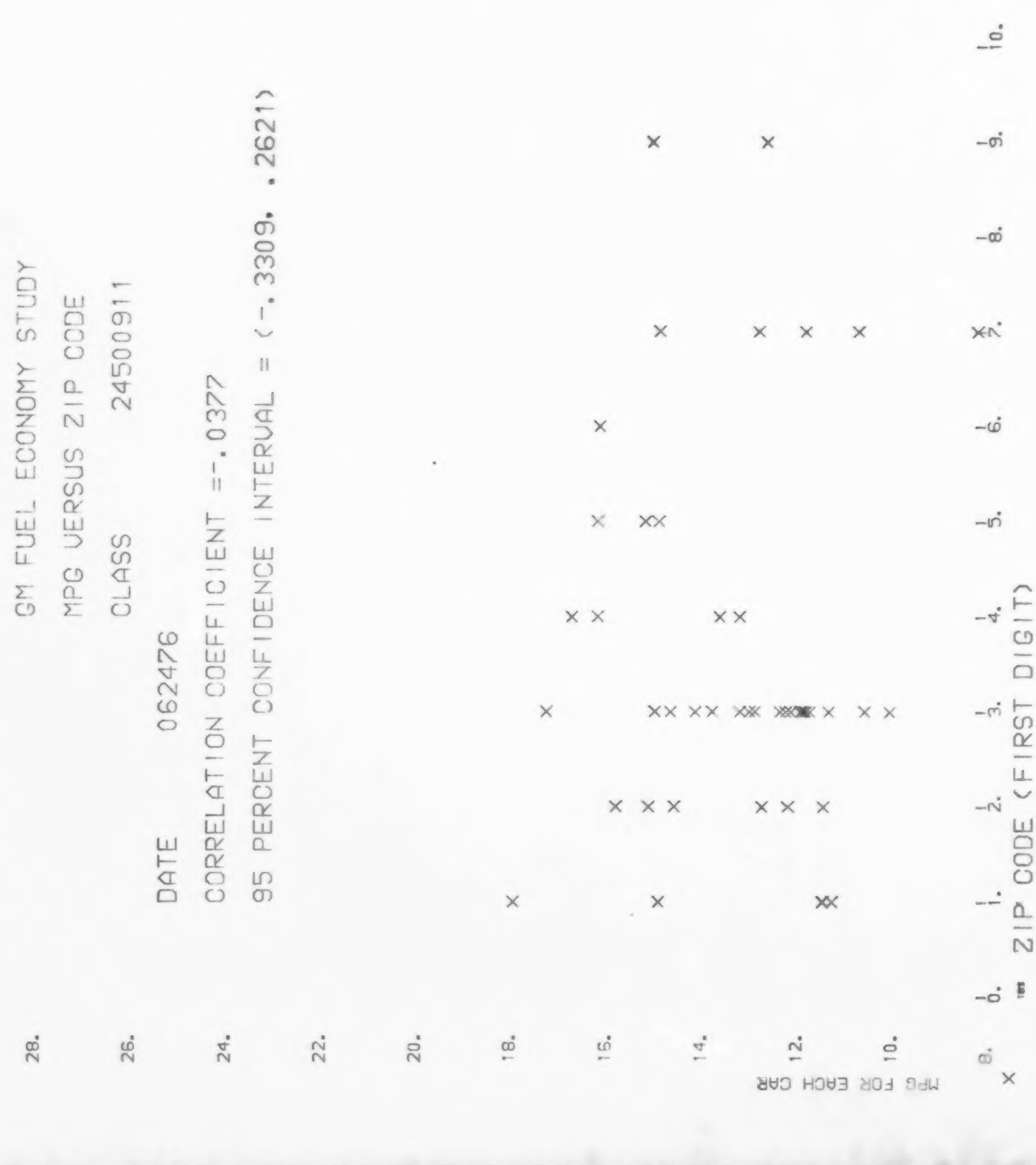
GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 24000911

DATE 062476
CORRELATION COEFFICIENT = .5308
95 PERCENT CONFIDENCE INTERVAL = (.2905. .7082)

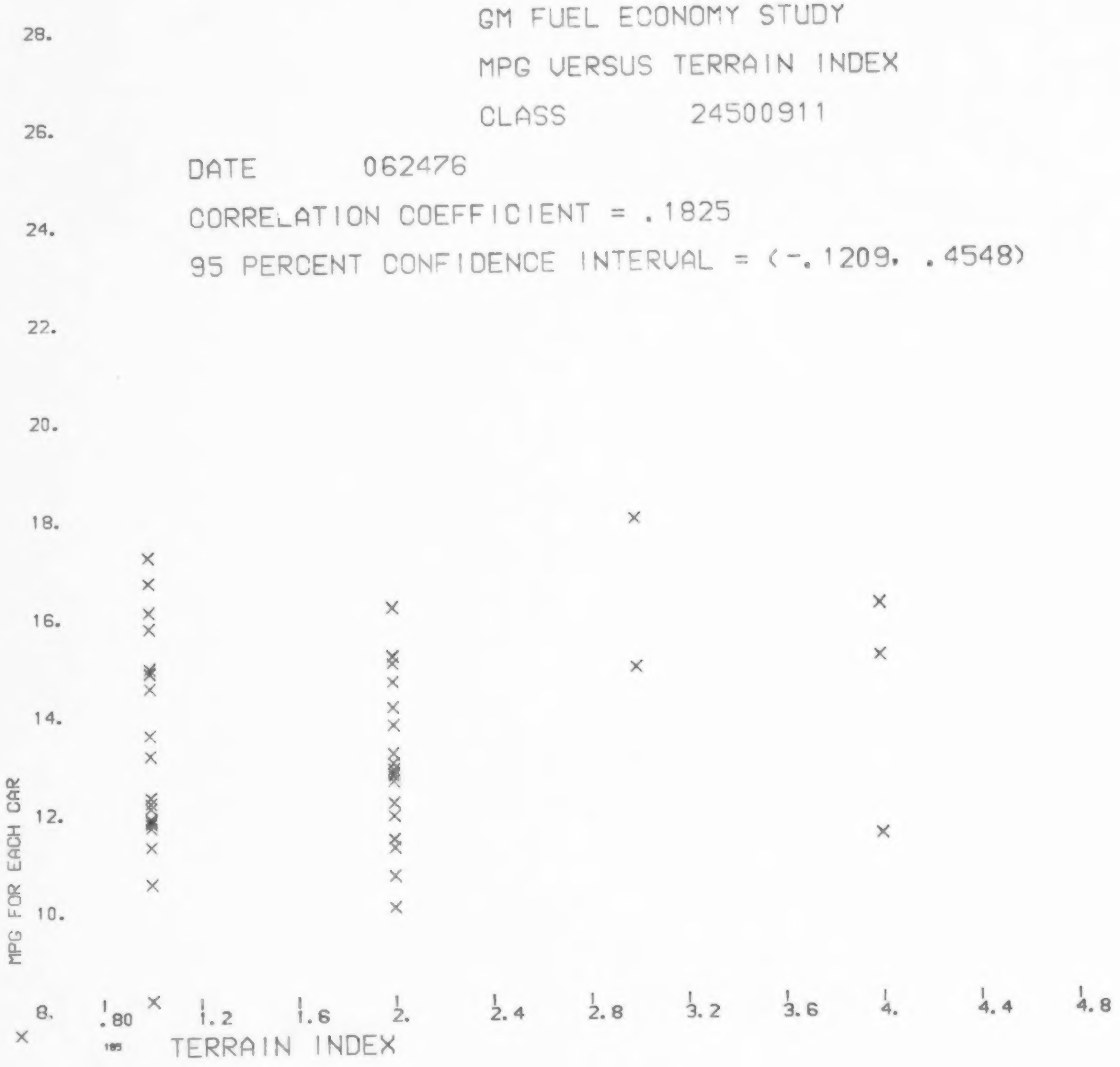


GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 24500911

DATE 062476
CORRELATION COEFFICIENT =-.5436
95 PERCENT CONFIDENCE INTERVAL = (-.7237,-.2942)

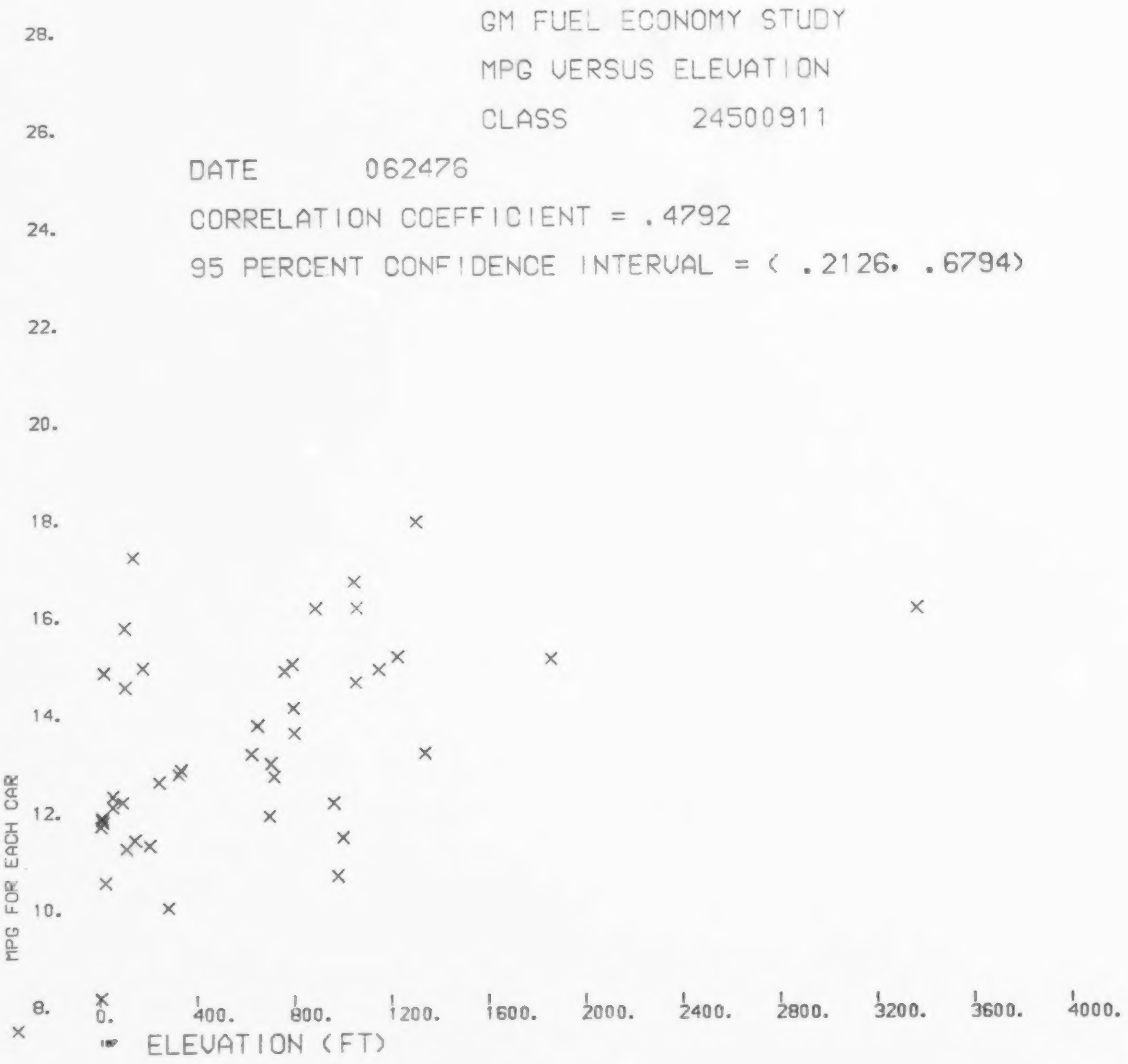


GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 24500911
DATE 062476
CORRELATION COEFFICIENT =-.0377
95 PERCENT CONFIDENCE INTERVAL = (-.3309, .2621)



GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 24500911

DATE 062476
CORRELATION COEFFICIENT = .1825
95 PERCENT CONFIDENCE INTERVAL = (-.1209, .4548)

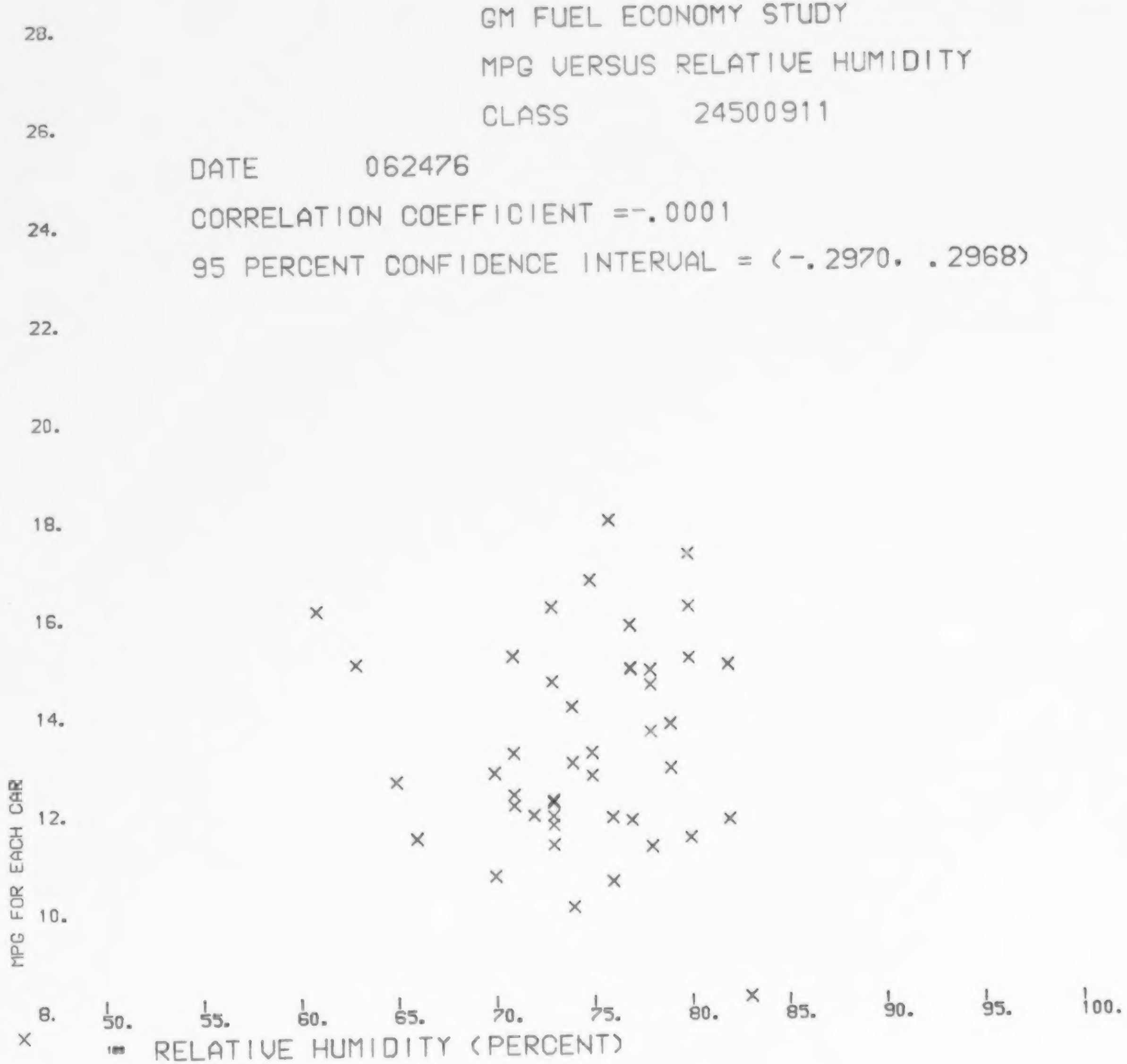


GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 24500911

DATE 062476
CORRELATION COEFFICIENT = .4792
95 PERCENT CONFIDENCE INTERVAL = (.2126, .6794)

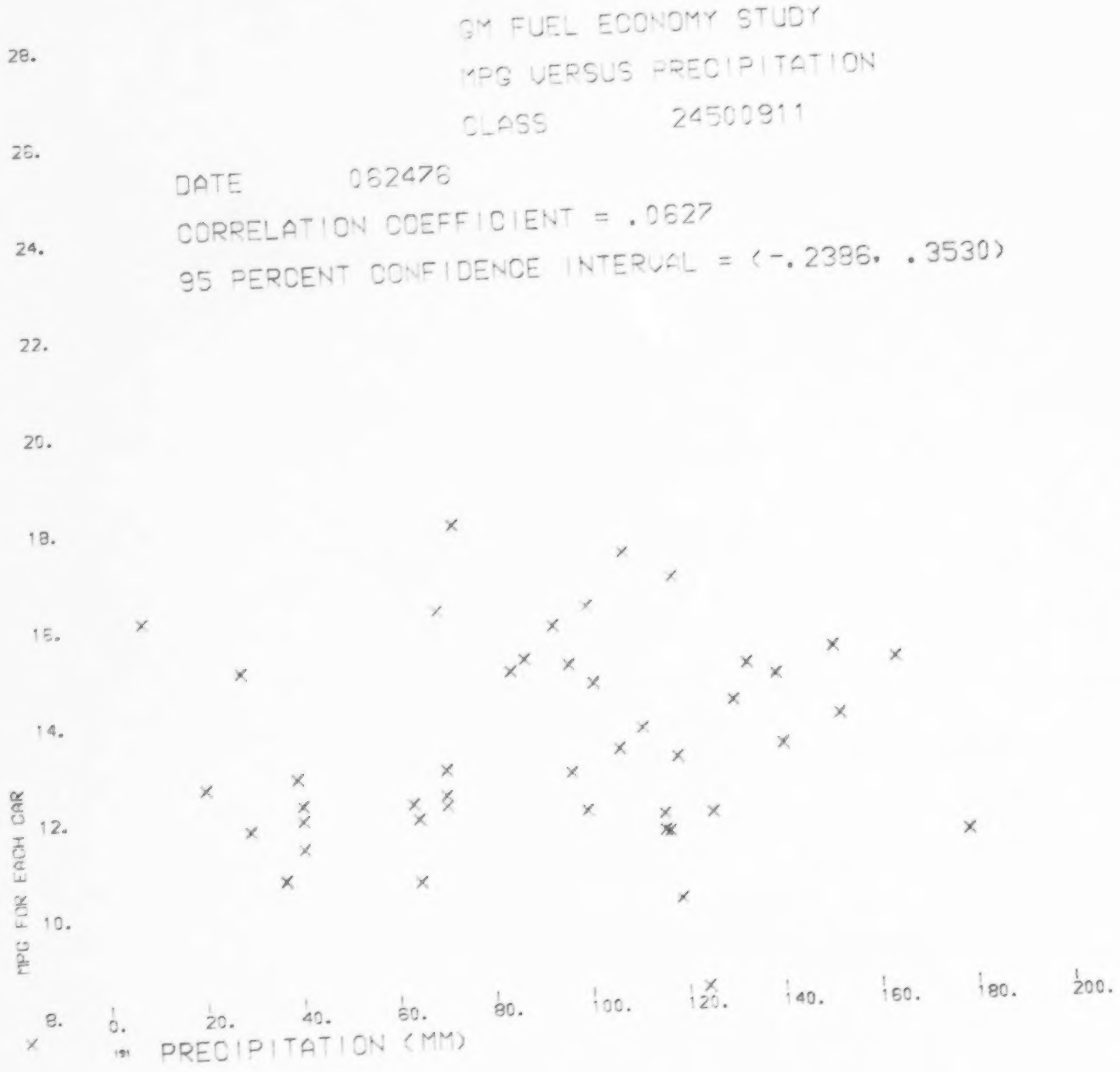
GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 24500911

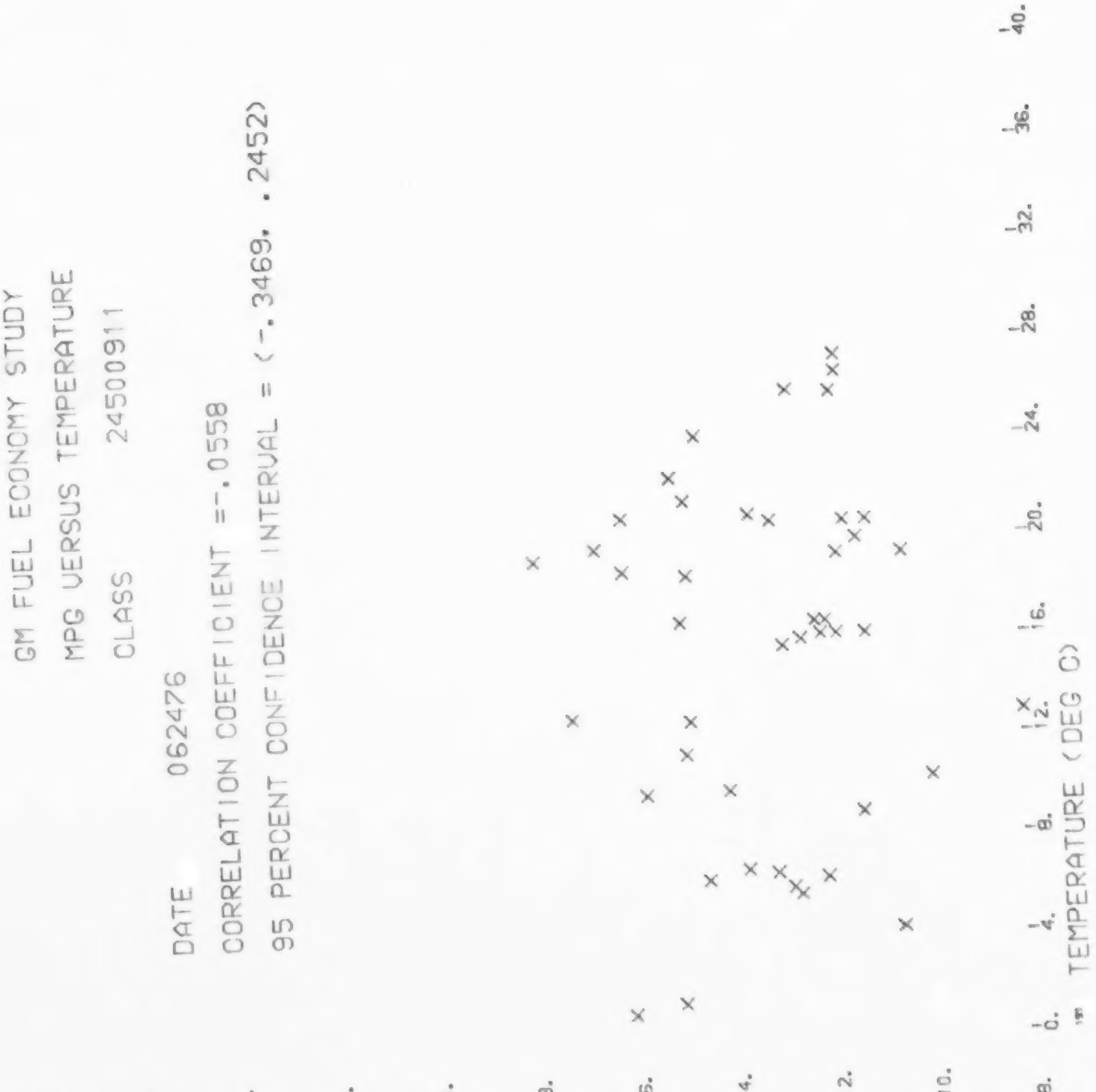
DATE 062476
CORRELATION COEFFICIENT =-.0001
95 PERCENT CONFIDENCE INTERVAL = (-.2970. .2968)



GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 24500911

DATE 062476
CORRELATION COEFFICIENT = .0627
95 PERCENT CONFIDENCE INTERVAL = (-.2386. .3530)

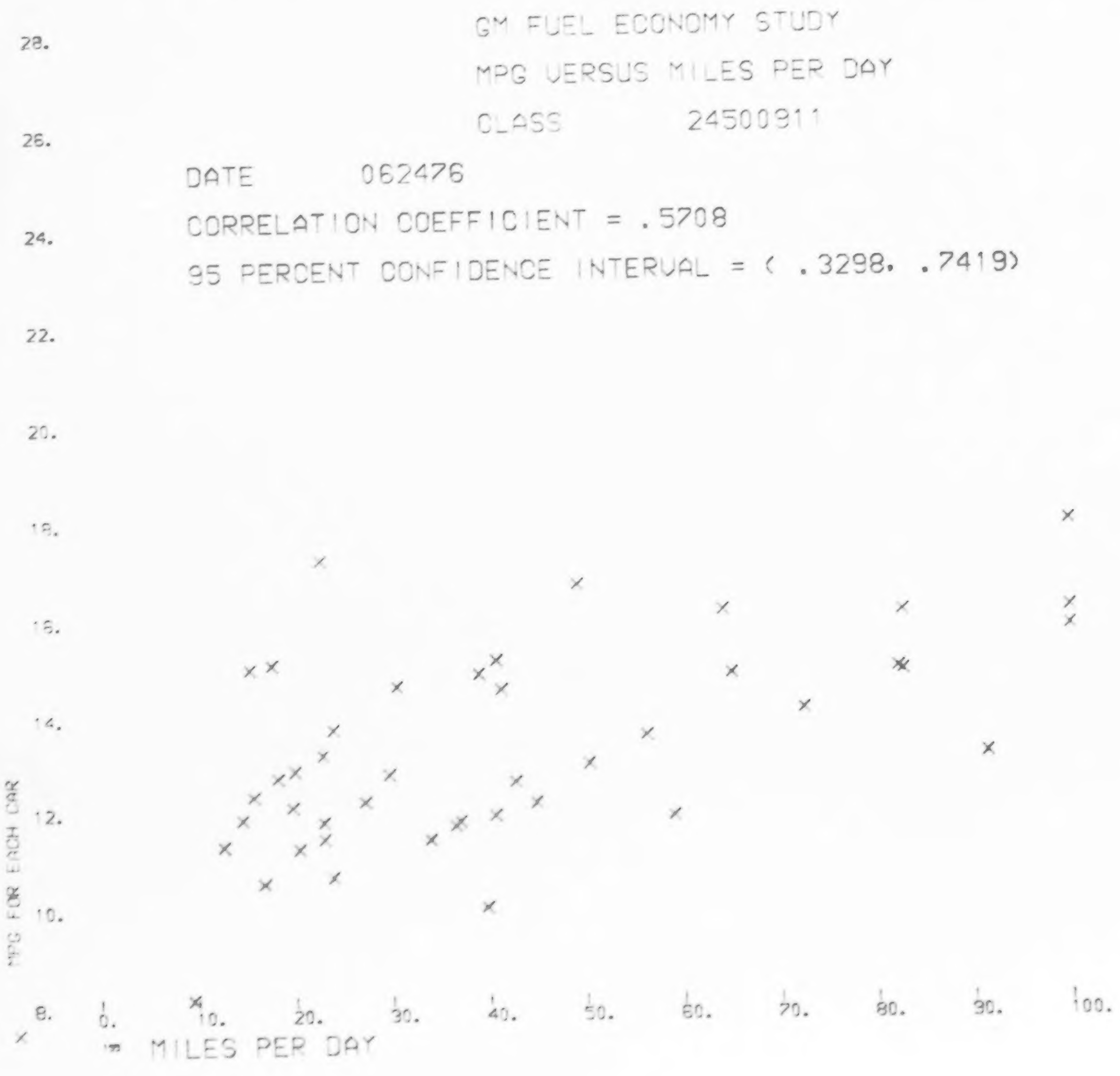




GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 24500911

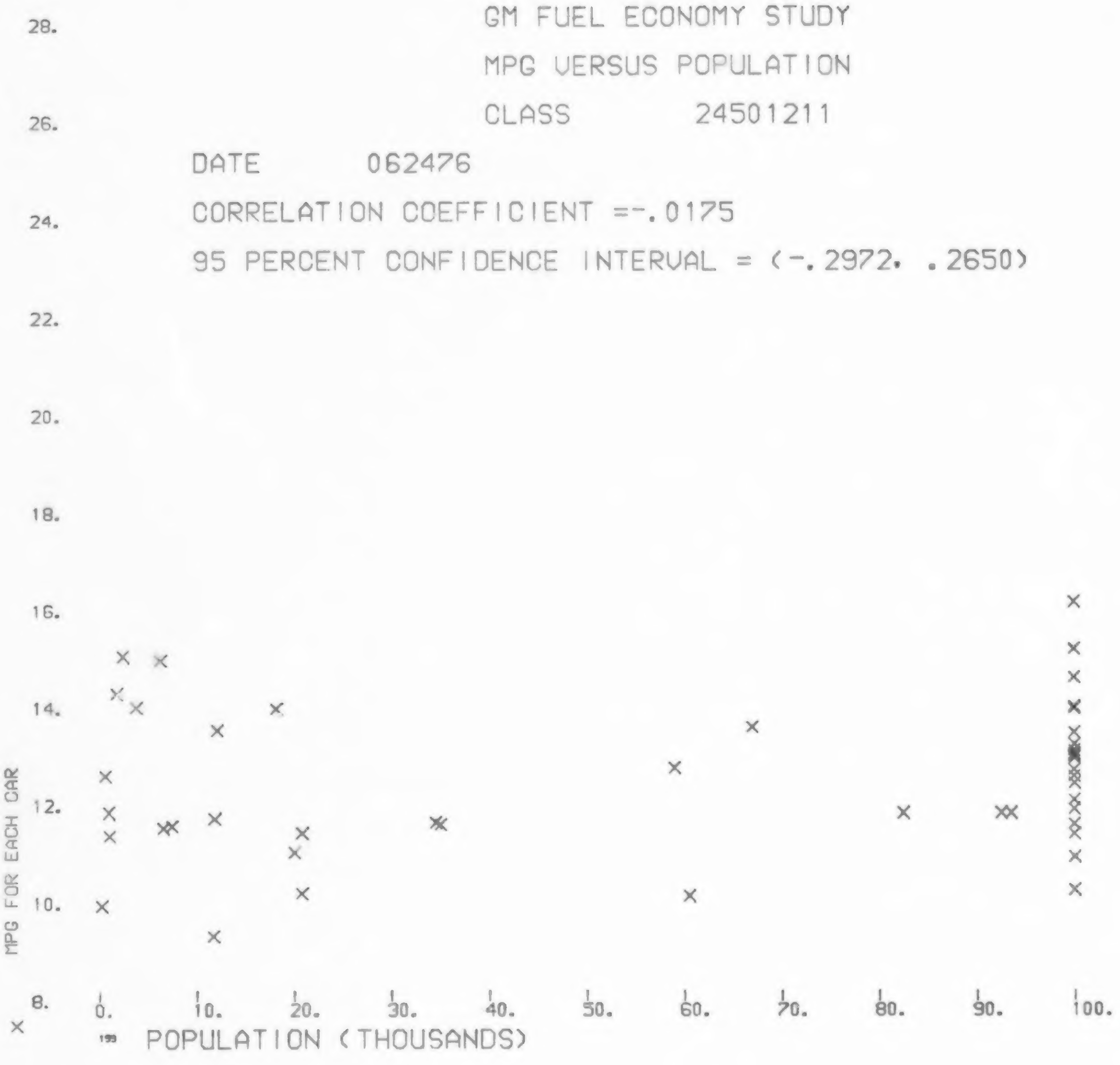
DATE 062476
CORRELATION COEFFICIENT =-.0558
95 PERCENT CONFIDENCE INTERVAL = (-.3469, .2452)

179.



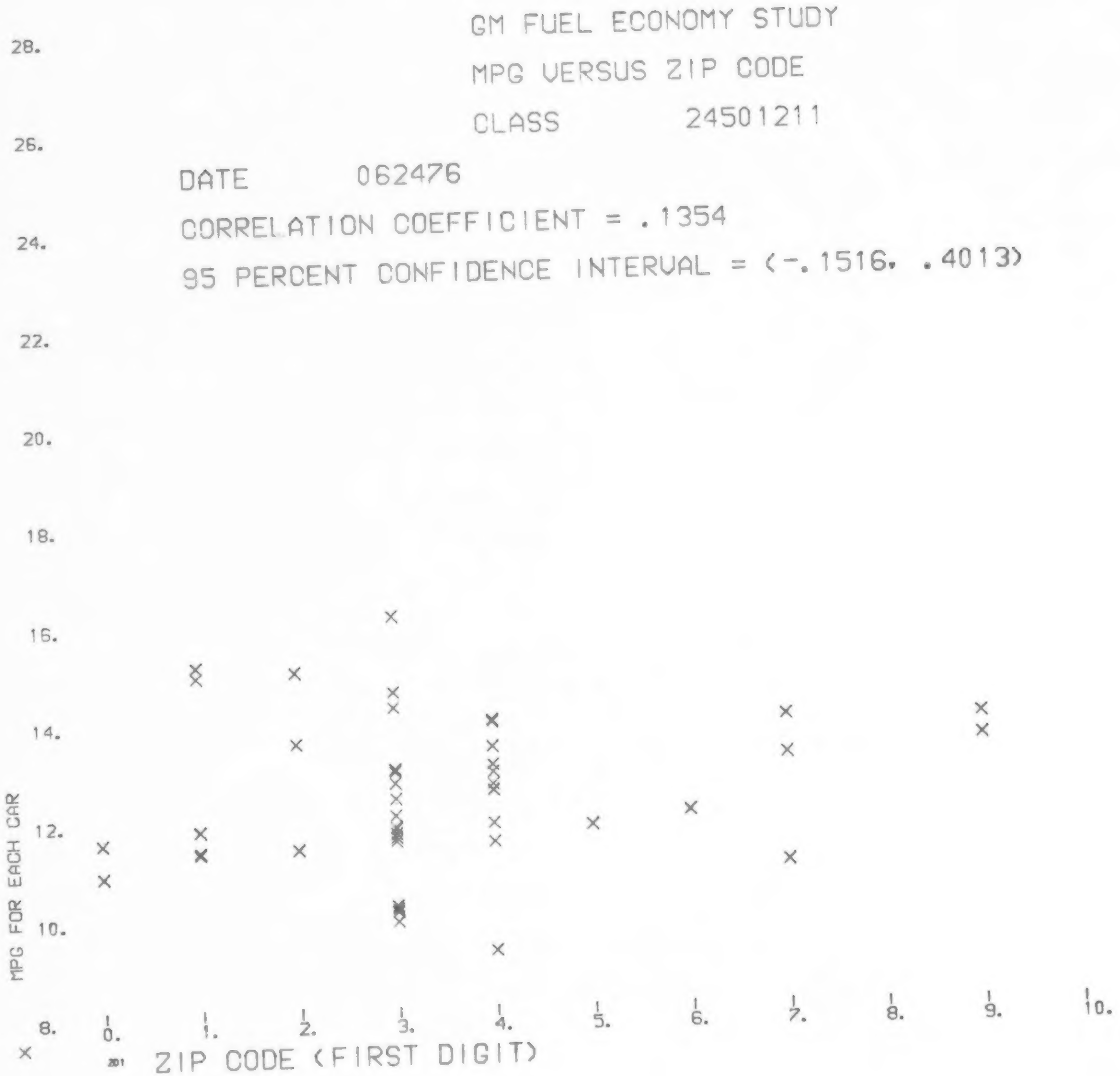
GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 24500911

DATE 062476
CORRELATION COEFFICIENT = .5708
95 PERCENT CONFIDENCE INTERVAL = (.3298, .7419)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 24501211

DATE 062476
CORRELATION COEFFICIENT =-.0175
95 PERCENT CONFIDENCE INTERVAL = (-.2972. .2650)

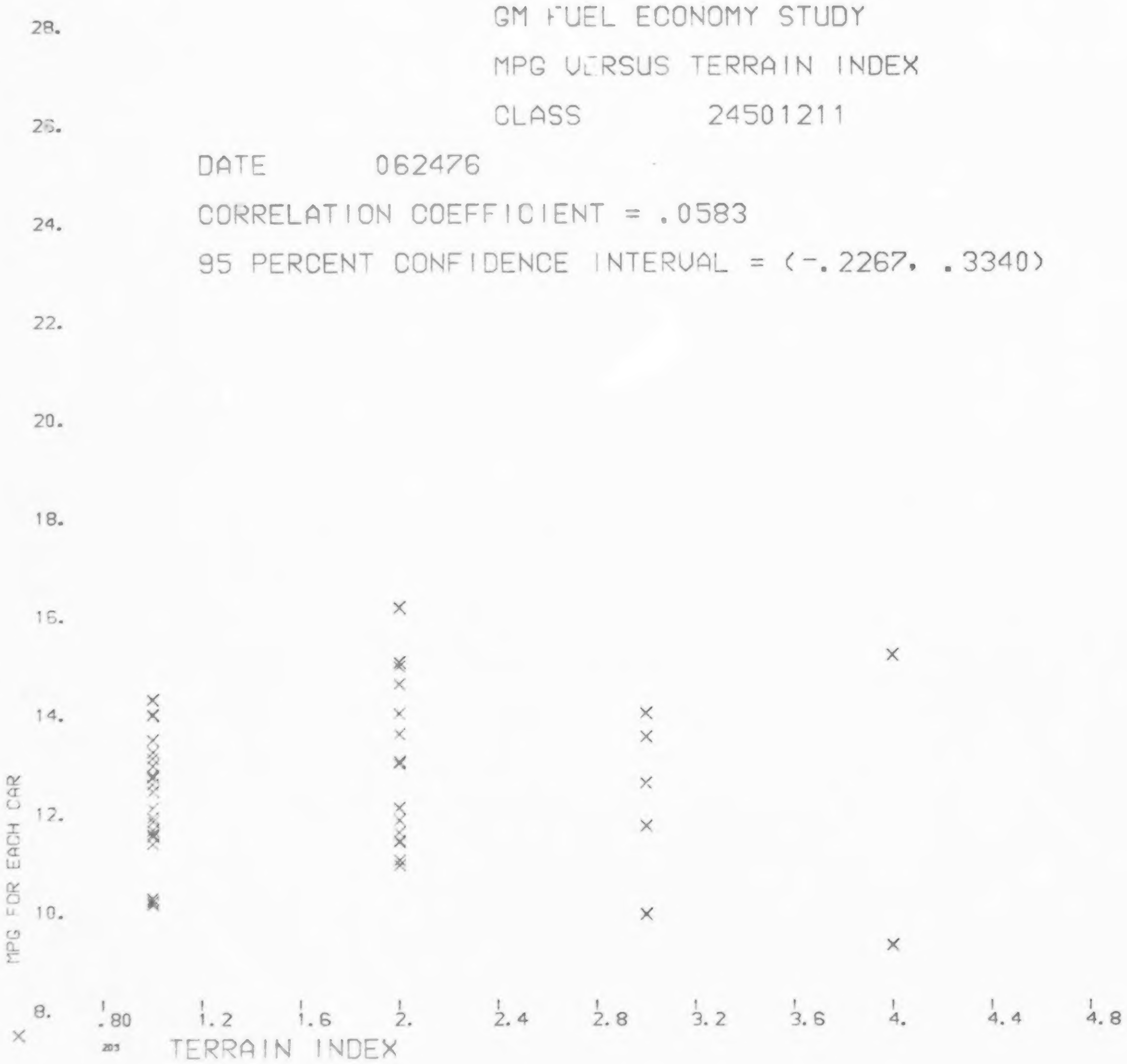


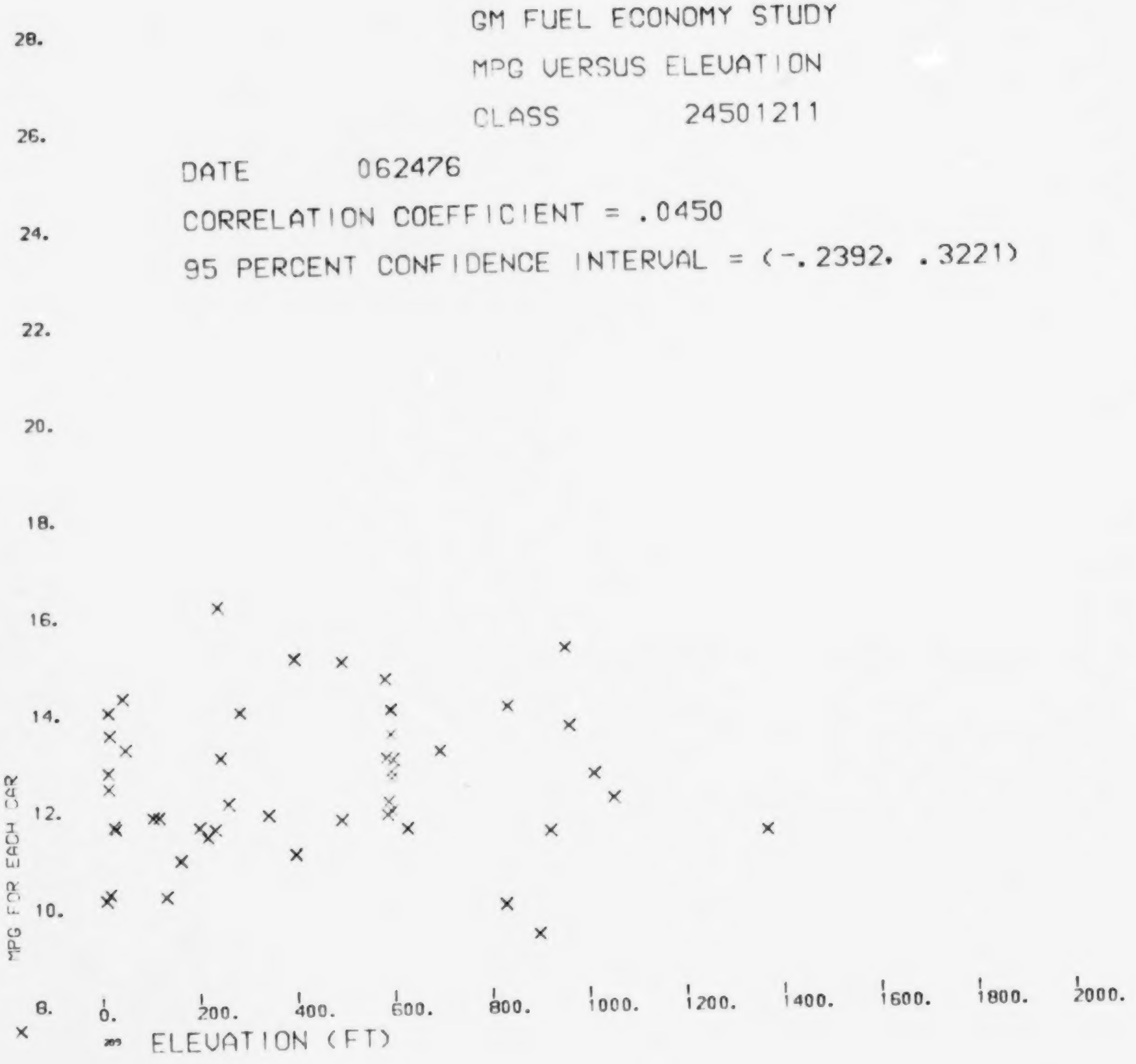
GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 24501211

DATE 062476
CORRELATION COEFFICIENT = .1354
95 PERCENT CONFIDENCE INTERVAL = (-.1516, .4013)

GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 24501211

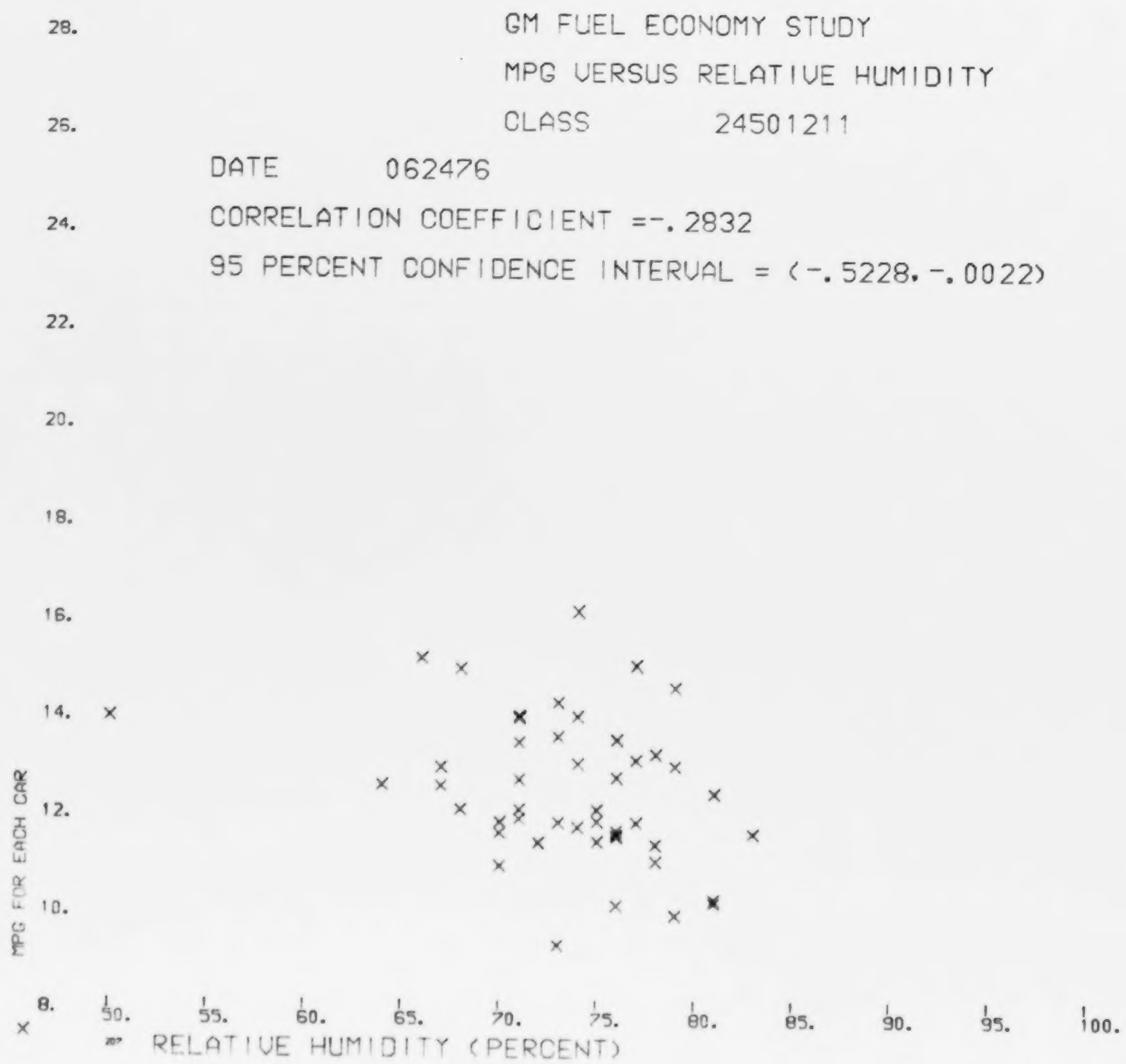
DATE 062476
CORRELATION COEFFICIENT = .0583
95 PERCENT CONFIDENCE INTERVAL = (-.2267, .3340)



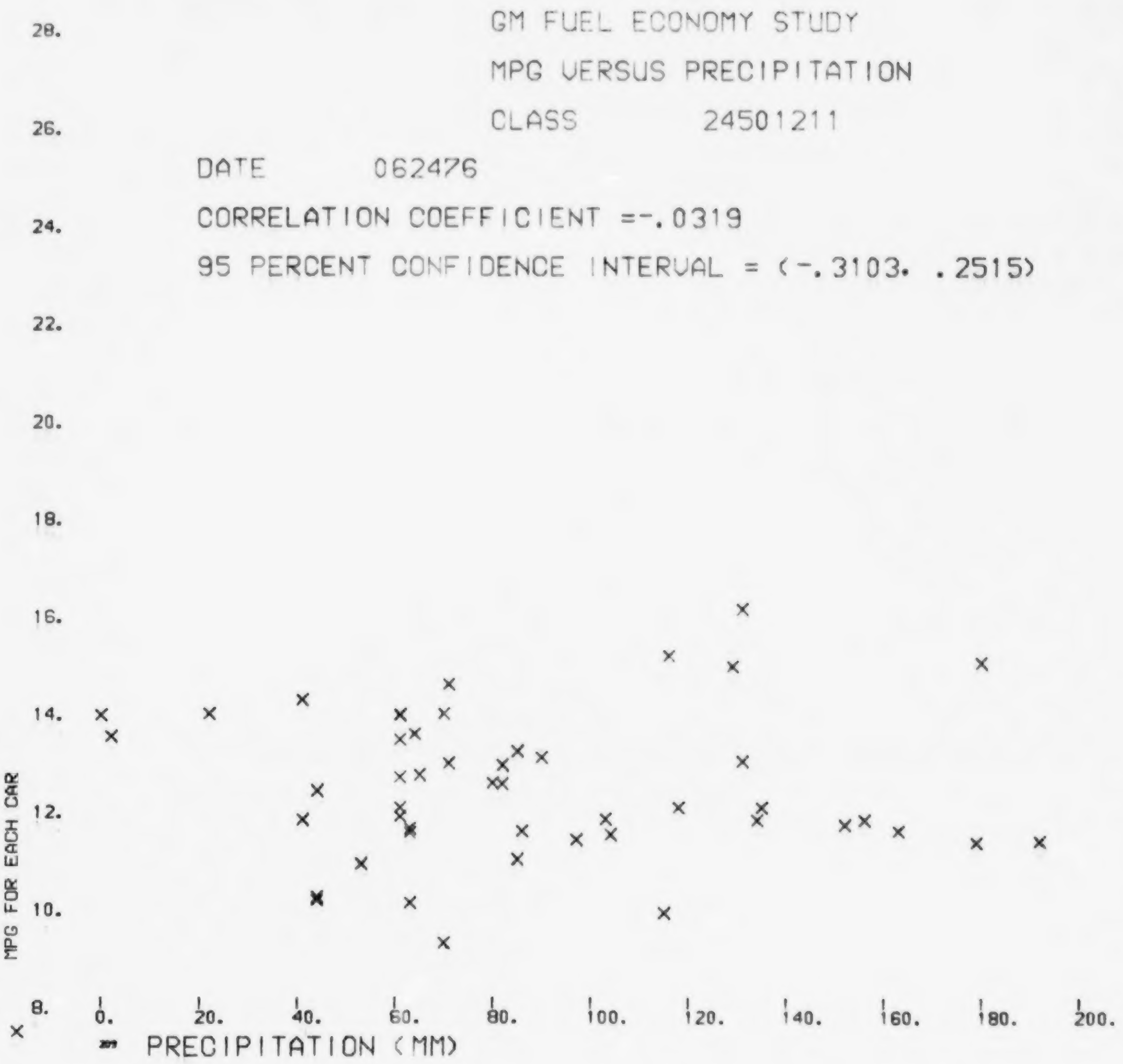


GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 24501211

DATE 062476
CORRELATION COEFFICIENT = .0450
95 PERCENT CONFIDENCE INTERVAL = (-.2392. .3221)



GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 24501211
DATE 062476
CORRELATION COEFFICIENT =-.2832
95 PERCENT CONFIDENCE INTERVAL = (-.5228.-.0022)



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GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS        24501211
DATE      062476
CORRELATION COEFFICIENT =-.0319
95 PERCENT CONFIDENCE INTERVAL = (-.3103. .2515)
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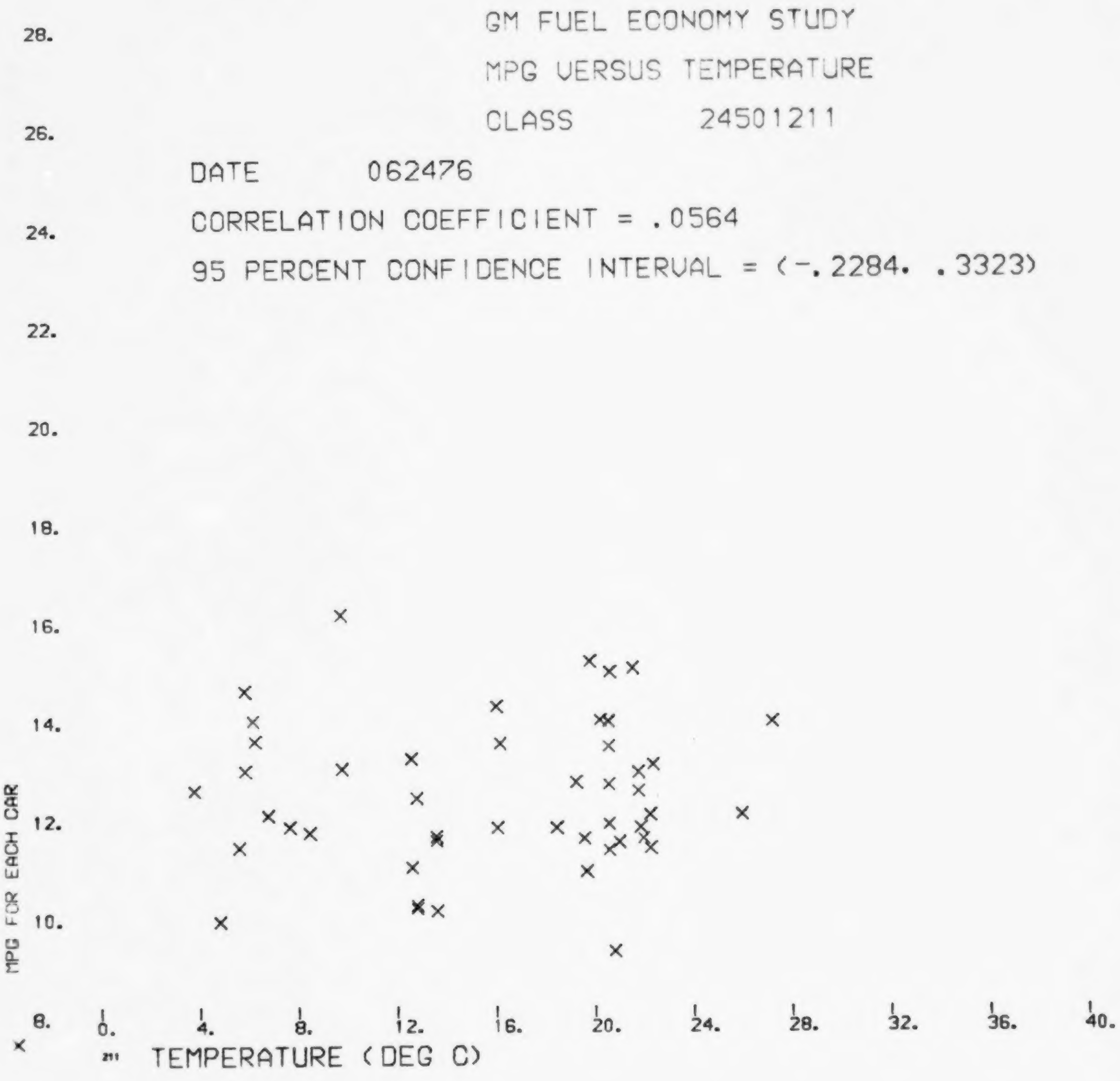
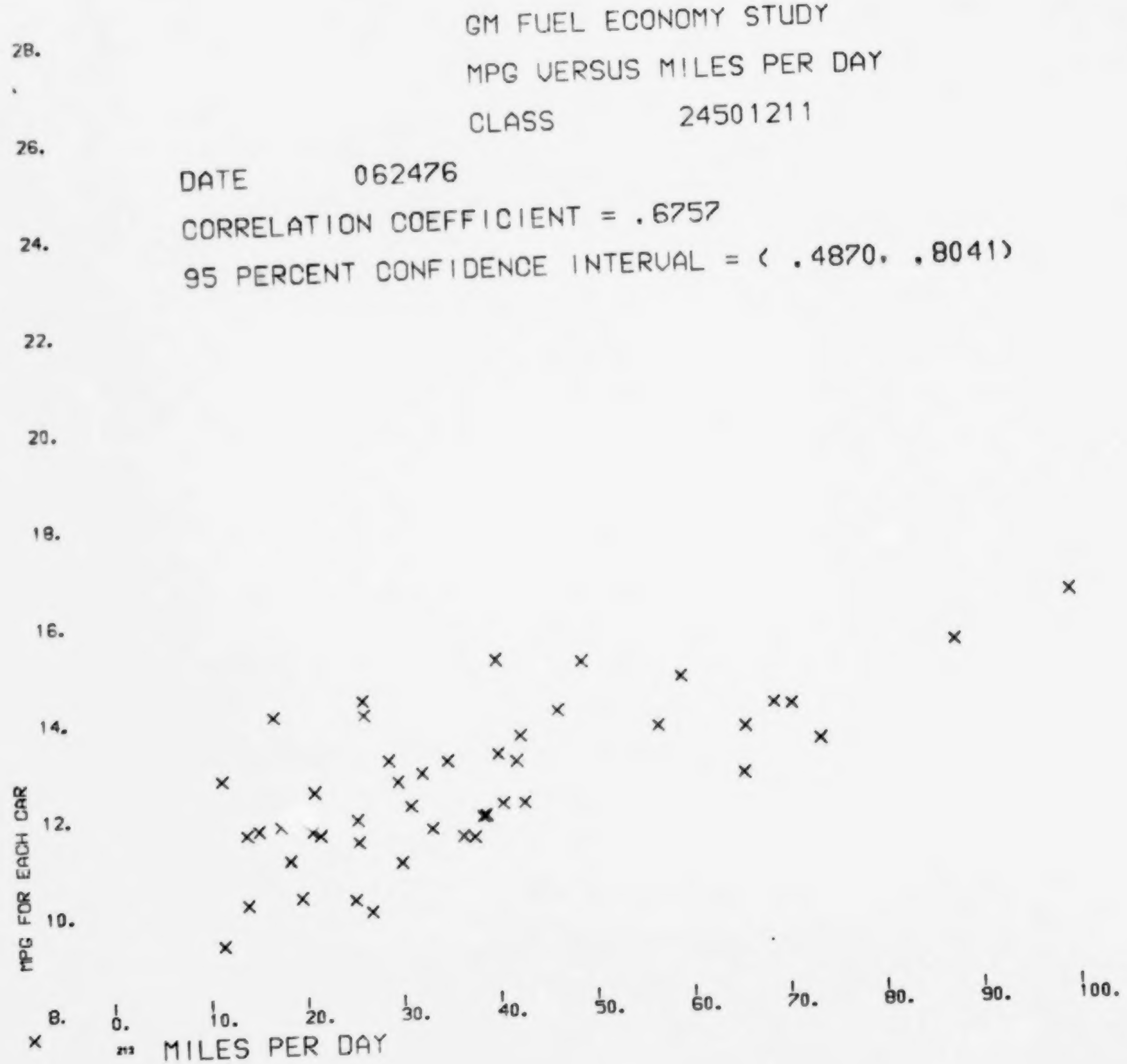


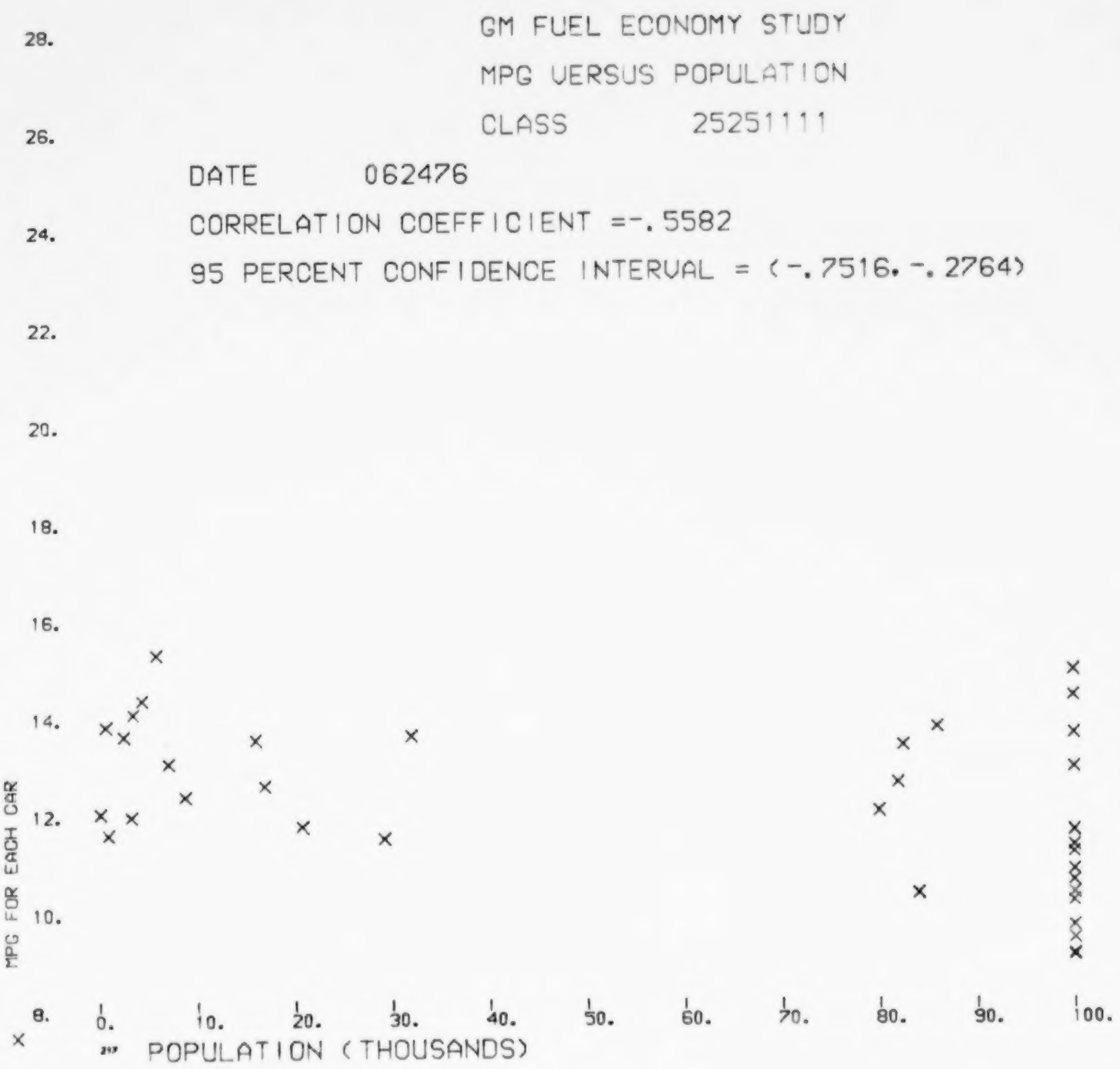
GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 24501211

DATE 062476
CORRELATION COEFFICIENT = .0564
95 PERCENT CONFIDENCE INTERVAL = (-.2284. .3323)



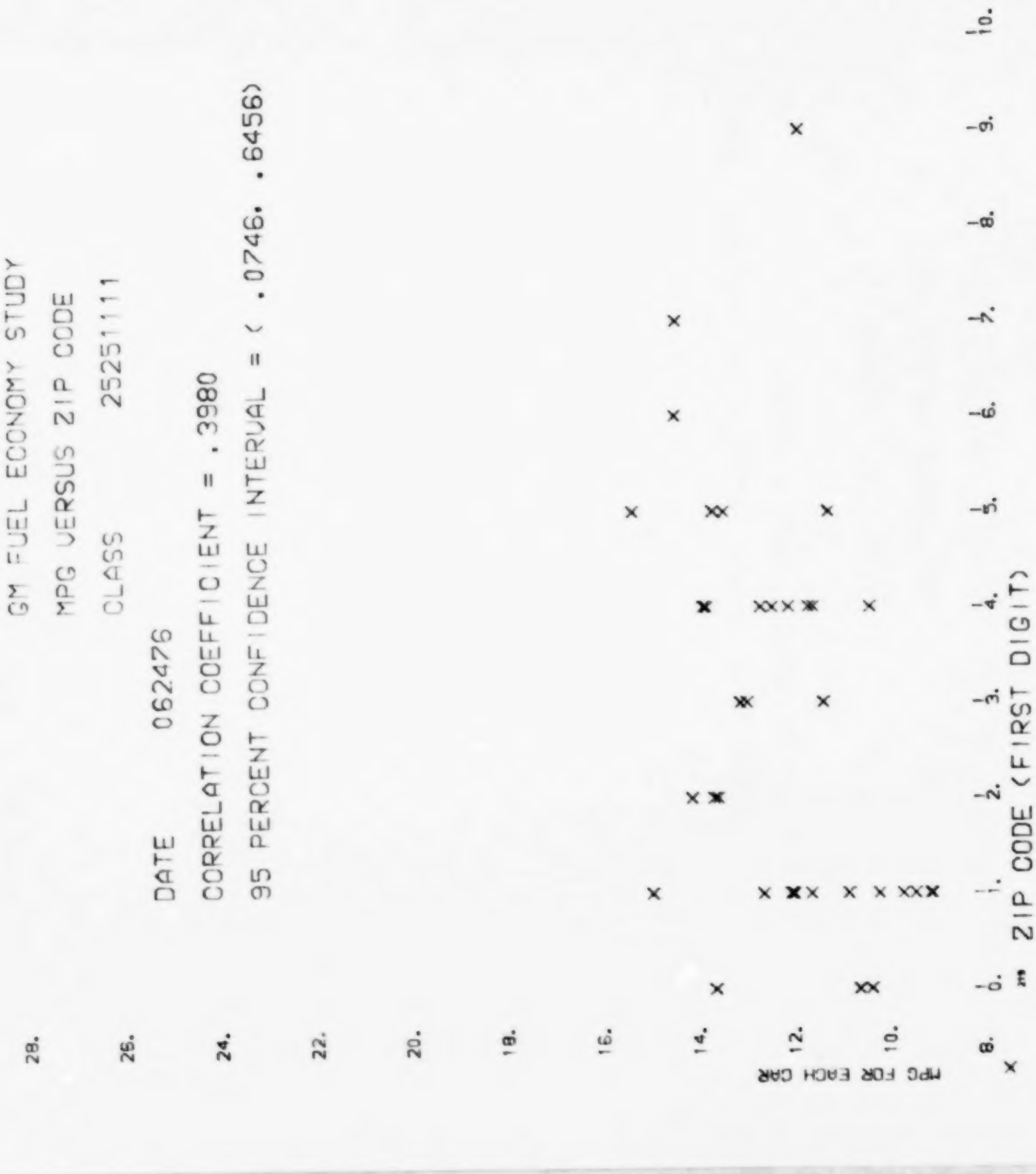
GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 24501211

DATE 062476
CORRELATION COEFFICIENT = .6757
95 PERCENT CONFIDENCE INTERVAL = (.4870, .8041)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 25251111

DATE 062476
CORRELATION COEFFICIENT =-.5582
95 PERCENT CONFIDENCE INTERVAL = (-.7516.-.2764)

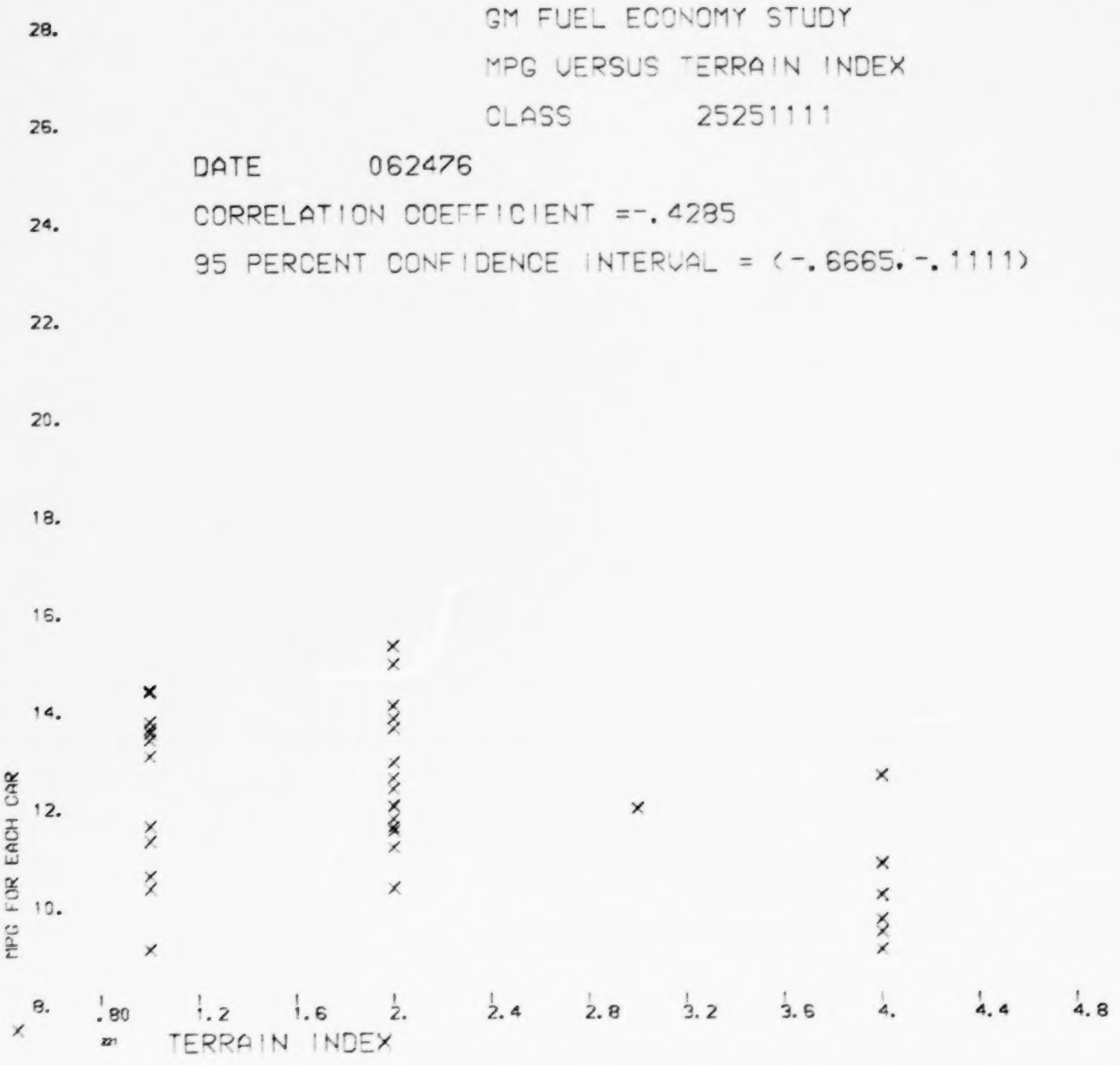


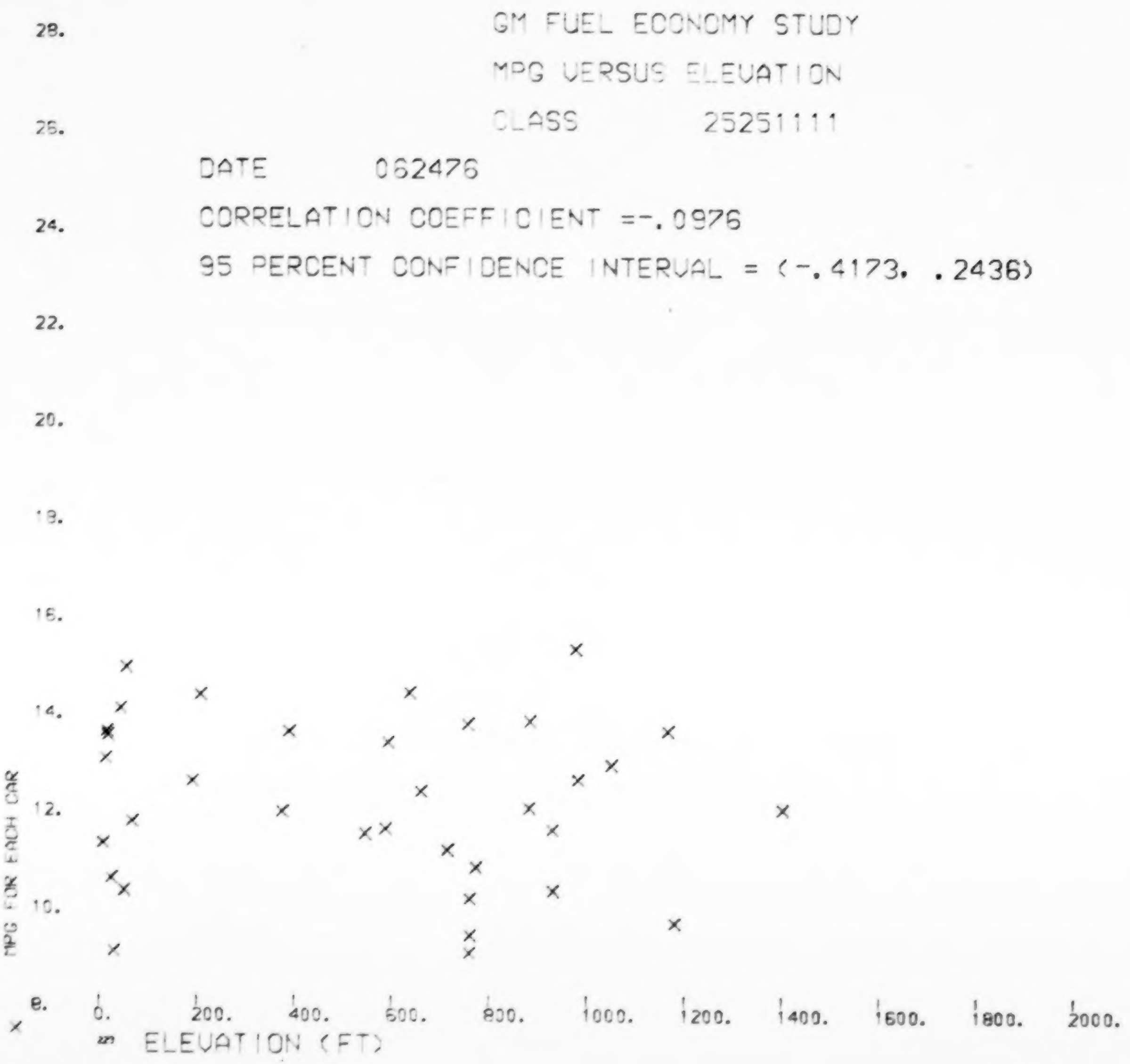
GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 25251111

DATE 062476
CORRELATION COEFFICIENT = .3980
95 PERCENT CONFIDENCE INTERVAL = (.0746, .6456)

GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 25251111

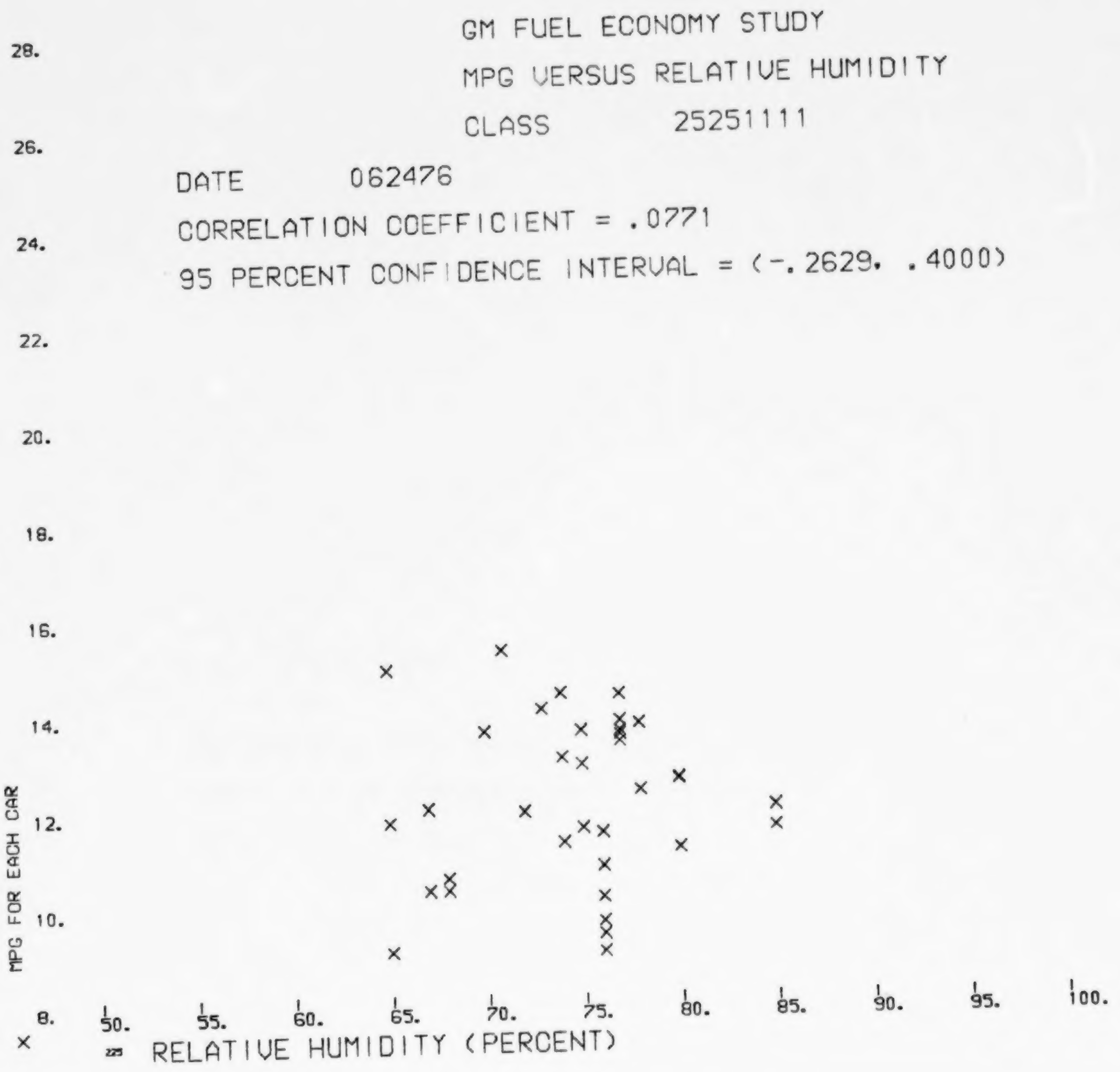
DATE 062476
CORRELATION COEFFICIENT =-.4285
95 PERCENT CONFIDENCE INTERVAL = (-.6665,-.1111)





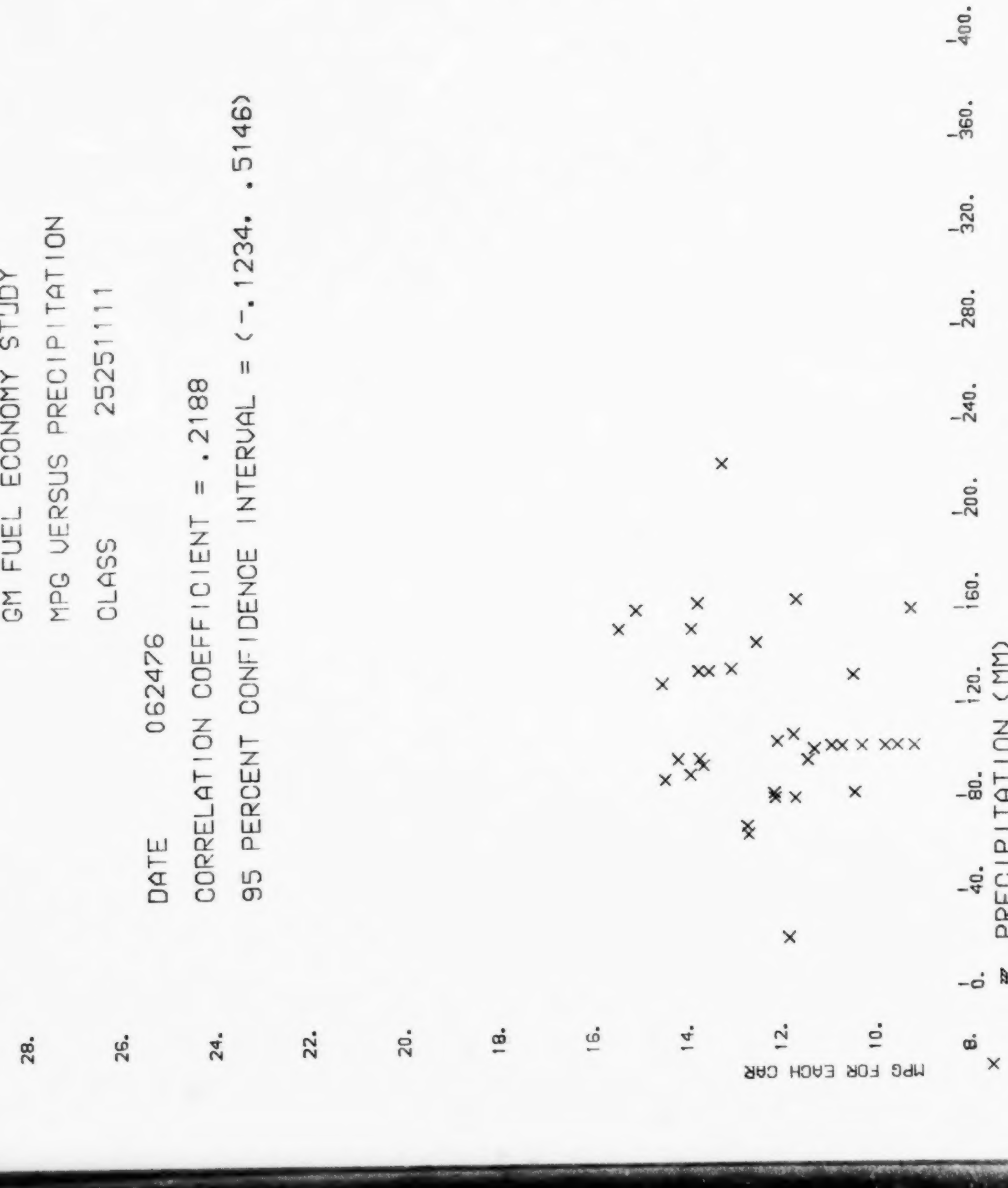
GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 25251111

DATE 062476
CORRELATION COEFFICIENT =-.0976
95 PERCENT CONFIDENCE INTERVAL = (-.4173, .2436)



GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 25251111

DATE 062476
CORRELATION COEFFICIENT = .0771
95 PERCENT CONFIDENCE INTERVAL = (-.2629. .4000)



GM FUEL ECONOMY STUDY

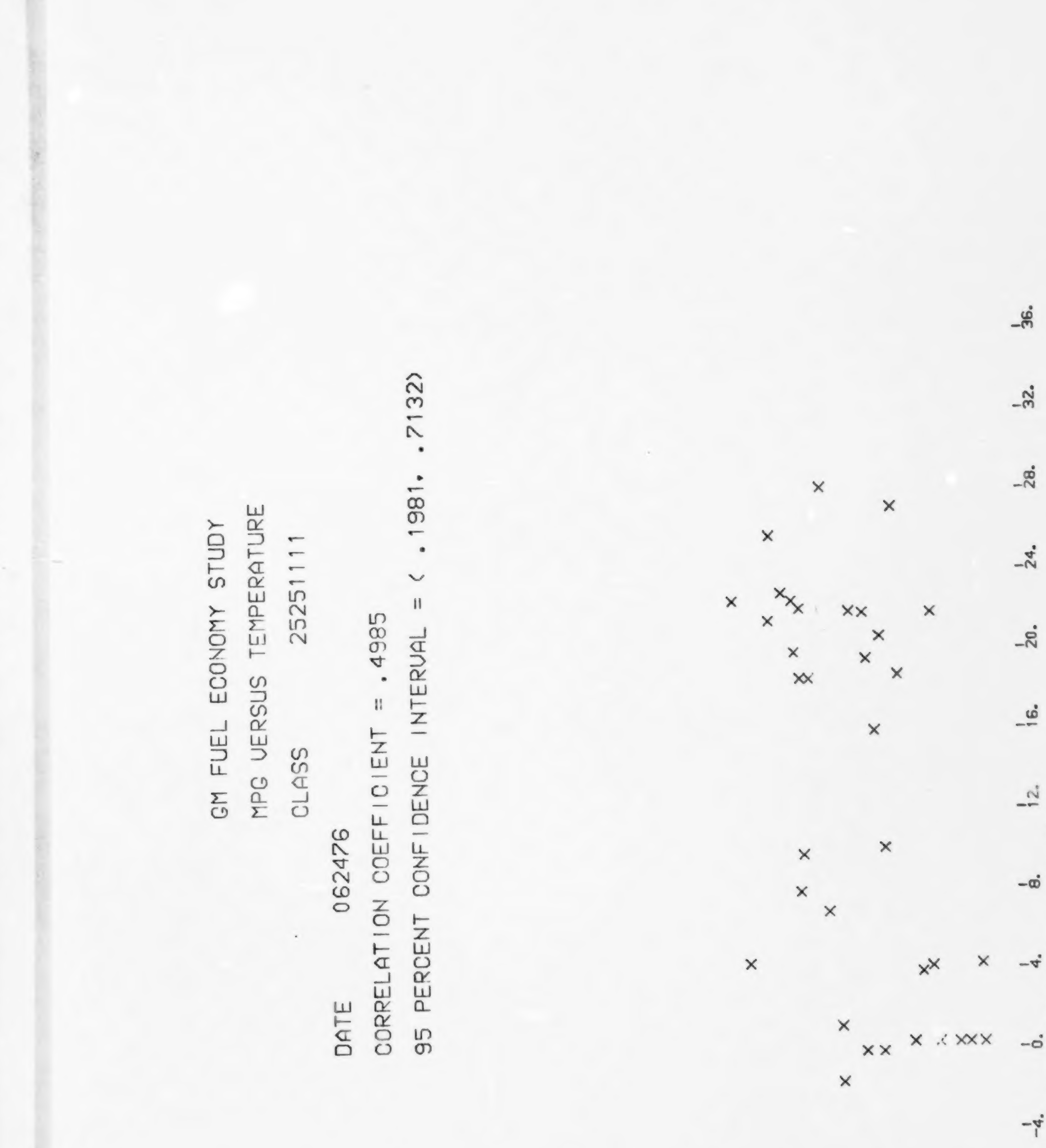
MPG VERSUS PRECIPITATION

CLASS 25251111

DATE 062476

CORRELATION COEFFICIENT = .2188

95 PERCENT CONFIDENCE INTERVAL = (-.1234, .5146)



GM FUEL ECONOMY STUDY

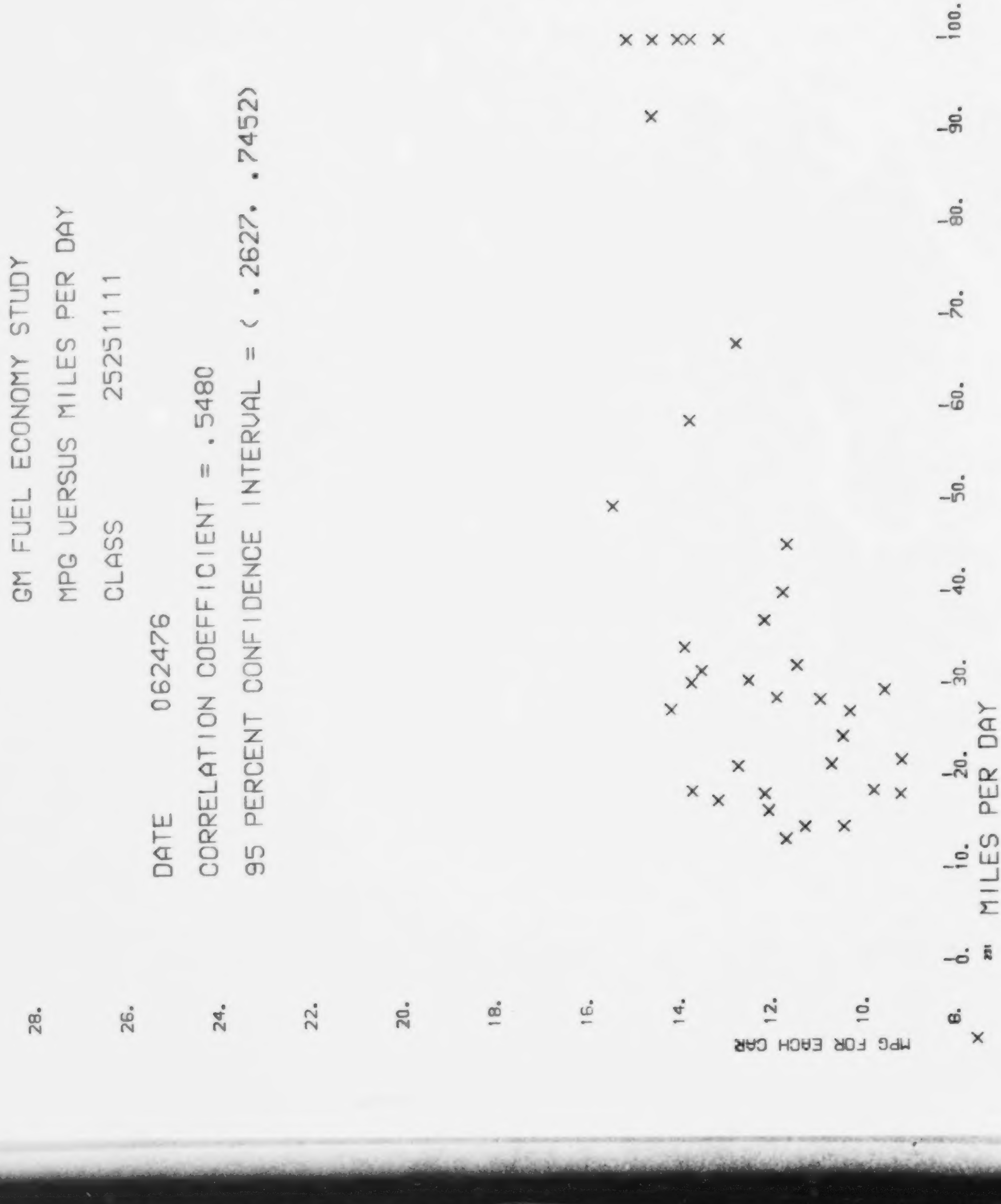
MPG VERSUS TEMPERATURE

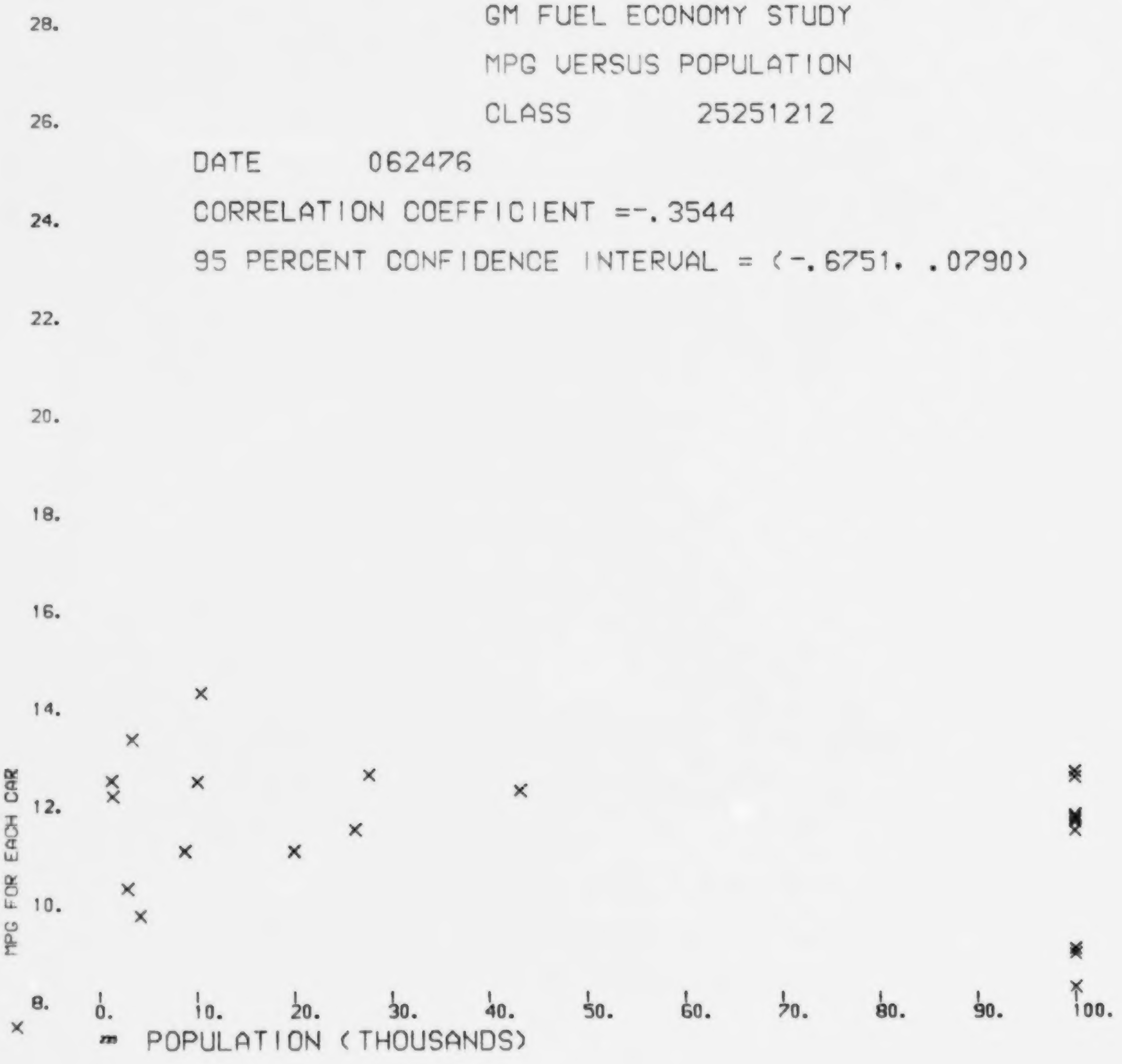
CLASS 25251111

DATE 062476

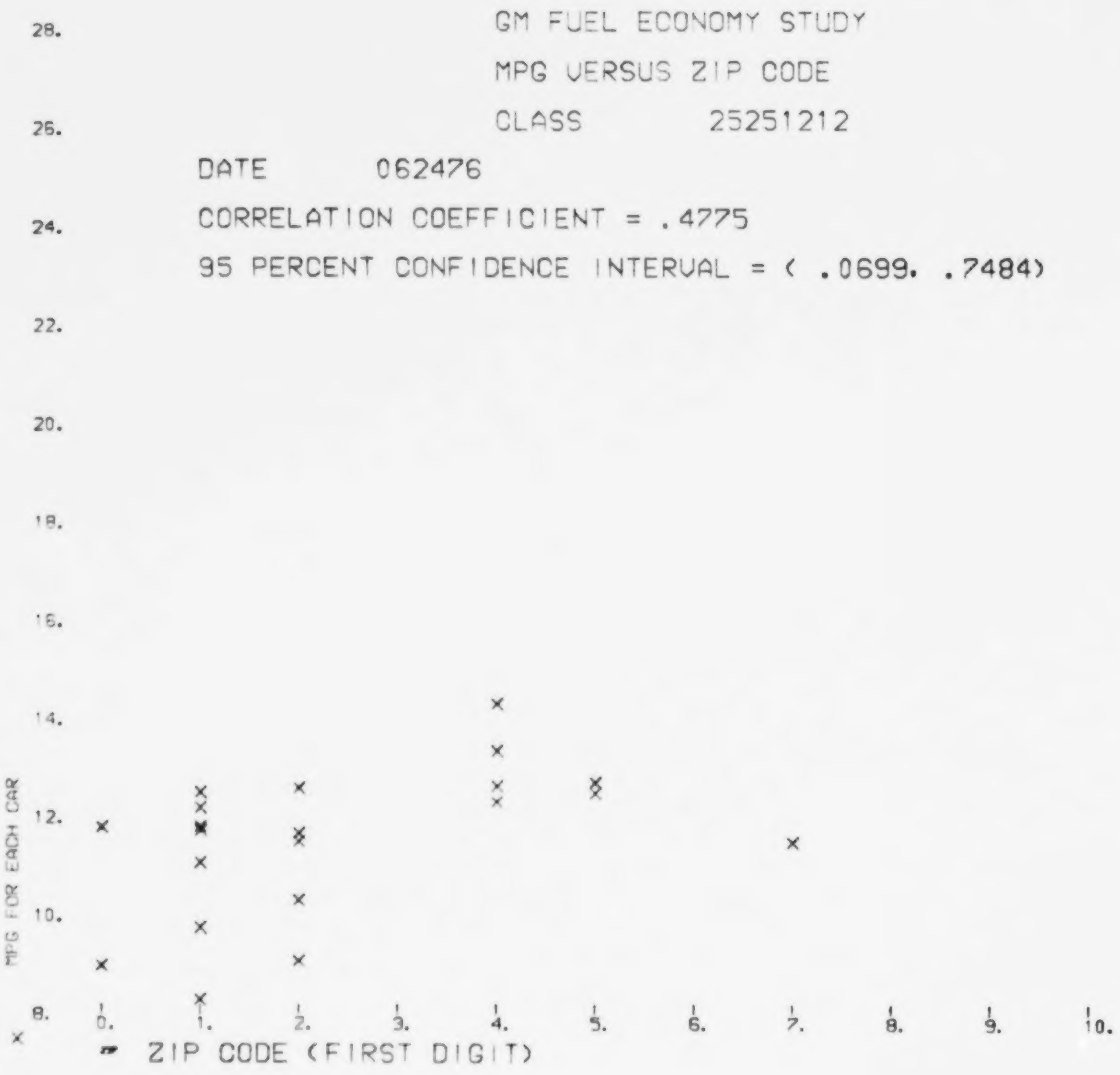
CORRELATION COEFFICIENT = .4985

95 PERCENT CONFIDENCE INTERVAL = (.1981, .7132)

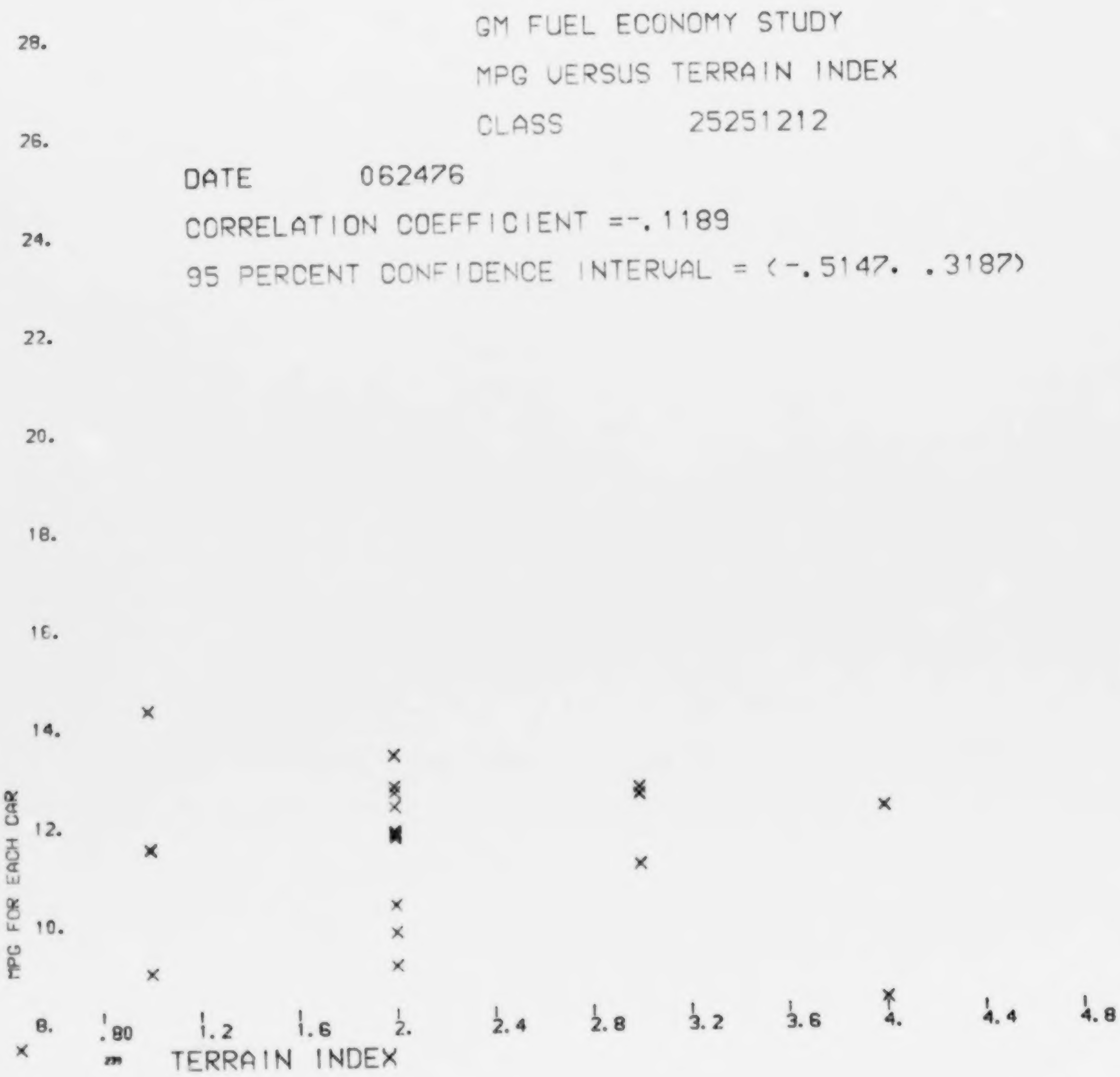

GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 25251111
DATE 062476
CORRELATION COEFFICIENT = .5480
95 PERCENT CONFIDENCE INTERVAL = (.2627, .7452)
MPG FOR EACH CAR
8.
10.
12.
14.
16.
18.
20.
22.
24.
26.
28.
MILES PER DAY
0.
10.
20.
30.
40.
50.
60.
70.
80.
90.
100.



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 25251212
DATE 062476
CORRELATION COEFFICIENT =-.3544
95 PERCENT CONFIDENCE INTERVAL = (-.6751. .0790)

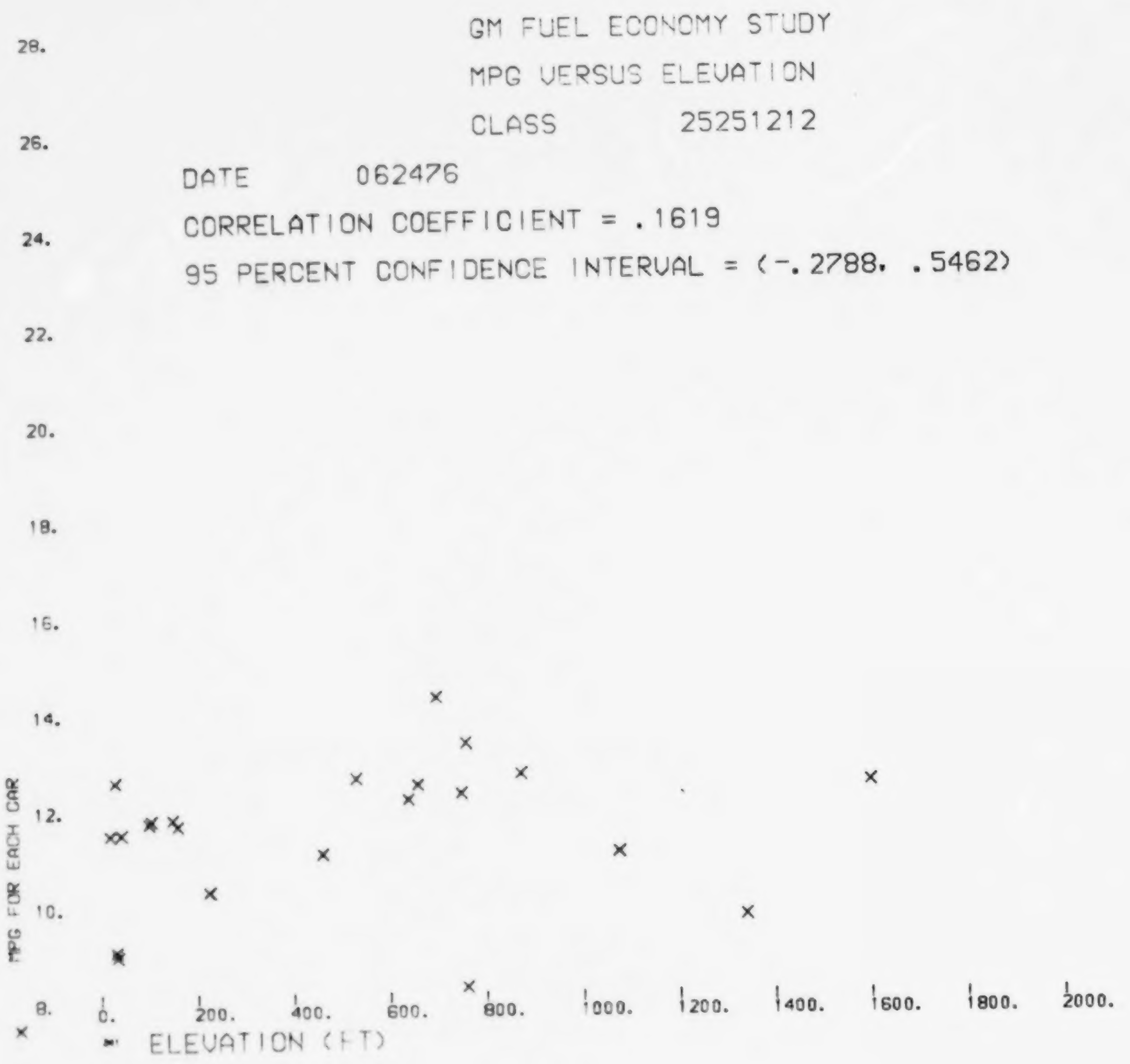


GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 25251212
DATE 062476
CORRELATION COEFFICIENT = .4775
95 PERCENT CONFIDENCE INTERVAL = (.0699. .7484)



GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 25251212

DATE 062476
CORRELATION COEFFICIENT =-.1189
95 PERCENT CONFIDENCE INTERVAL = (-.5147. .3187)



GM FUEL ECONOMY STUDY

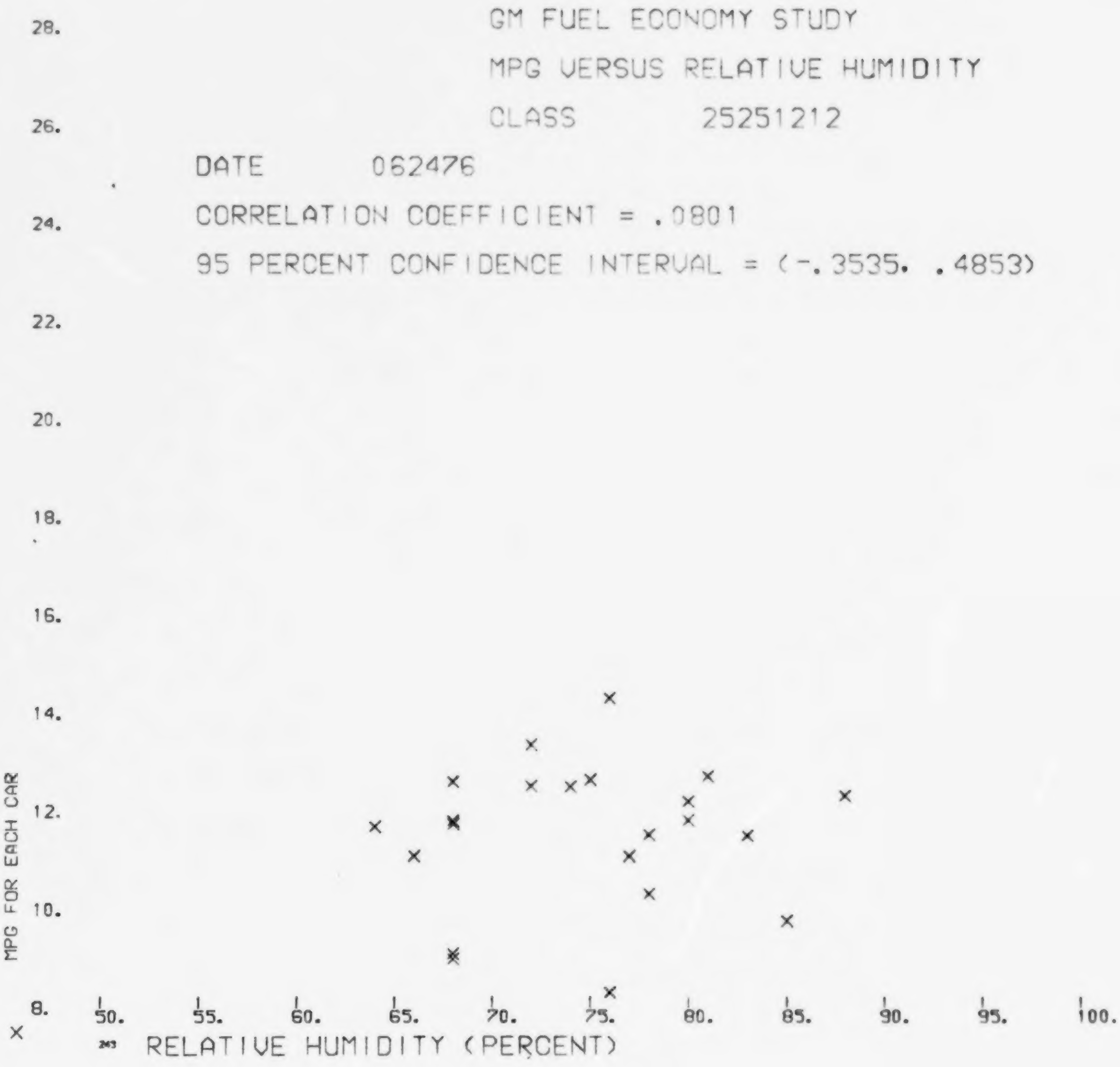
MPG VERSUS ELEVATION

CLASS 25251212

DATE 062476

CORRELATION COEFFICIENT = .1619

95 PERCENT CONFIDENCE INTERVAL = (-.2788, .5462)



GM FUEL ECONOMY STUDY

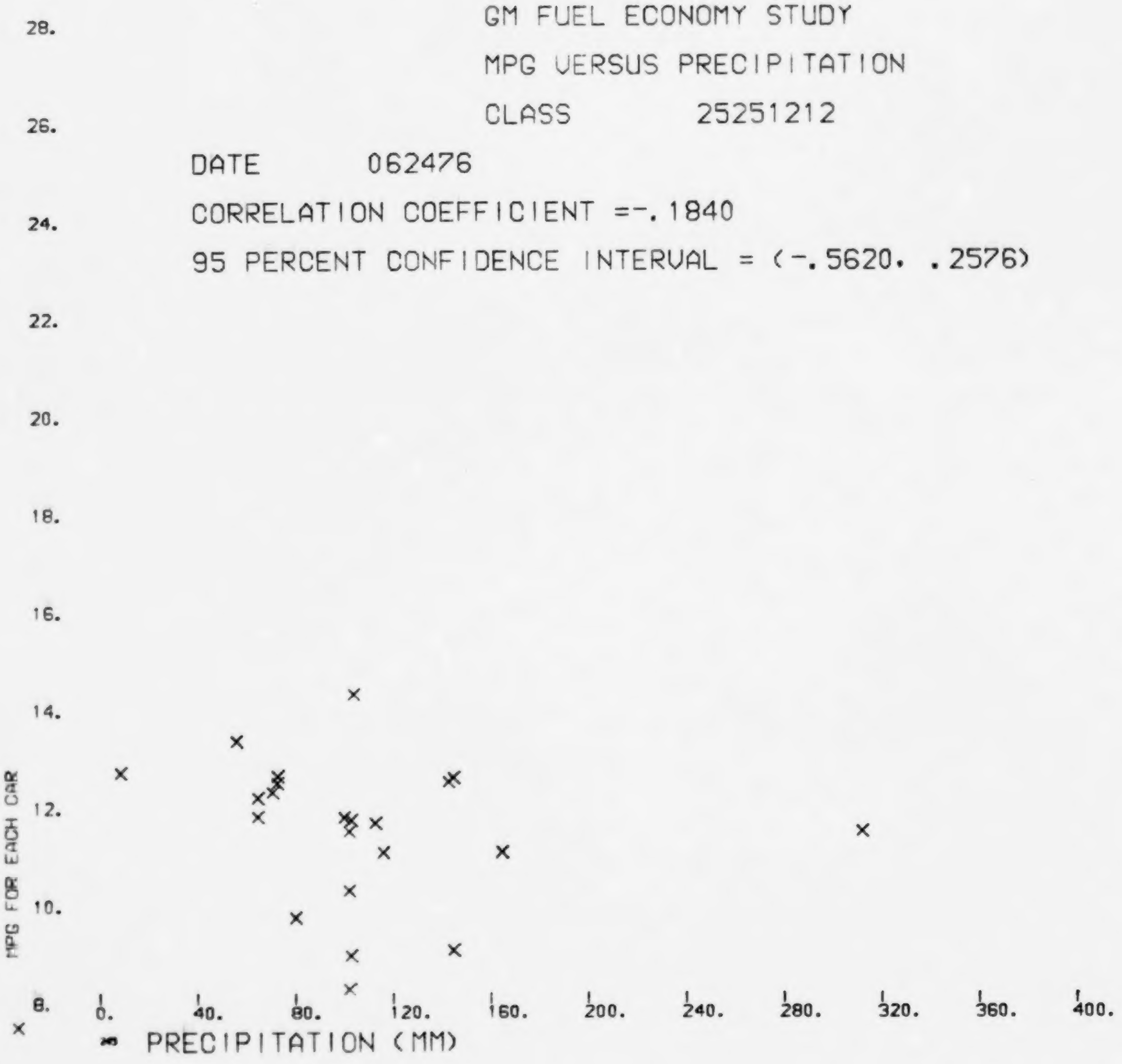
MPG VERSUS RELATIVE HUMIDITY

CLASS 25251212

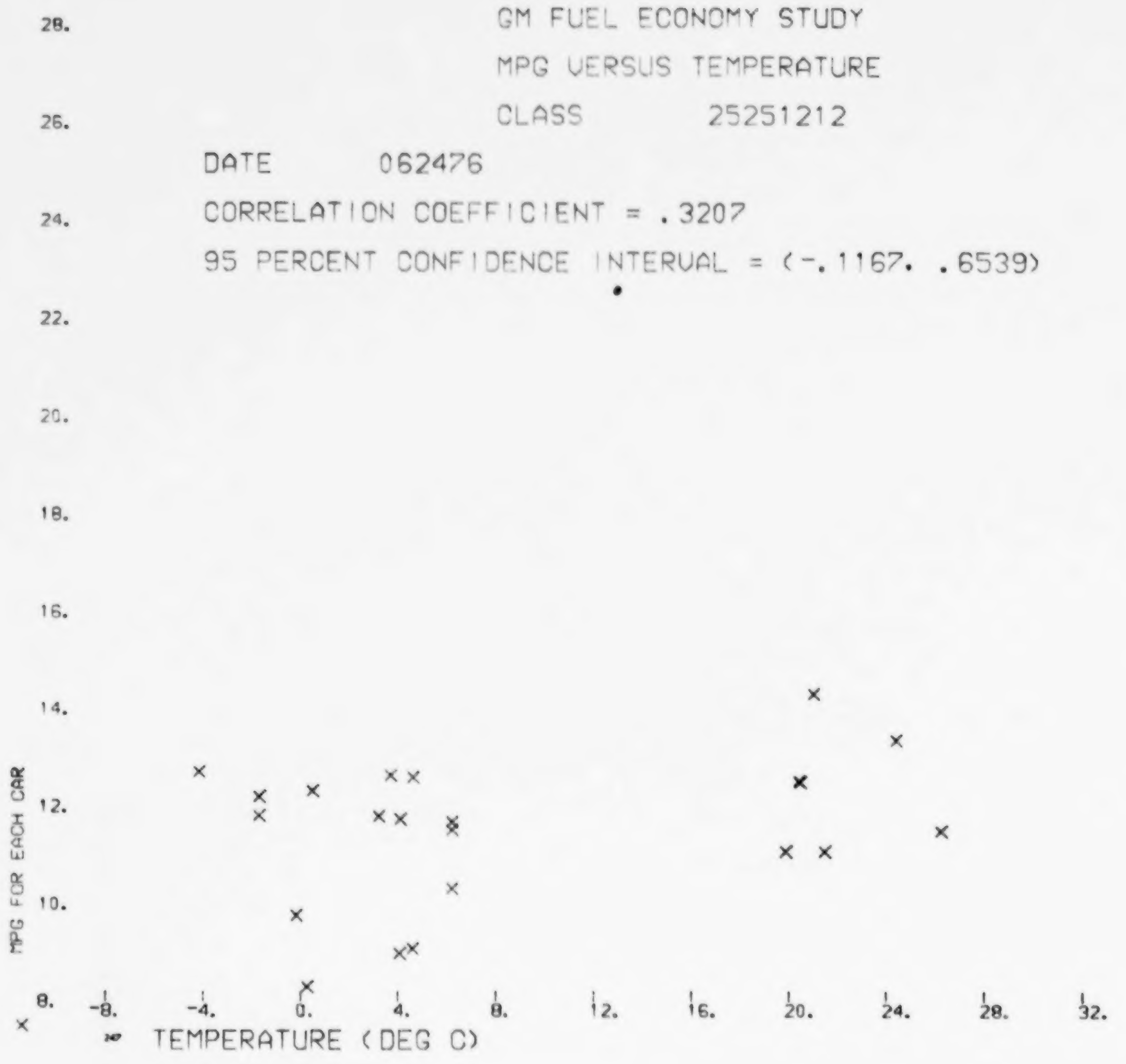
DATE 062476

CORRELATION COEFFICIENT = .0801

95 PERCENT CONFIDENCE INTERVAL = (-.3535. .4853)

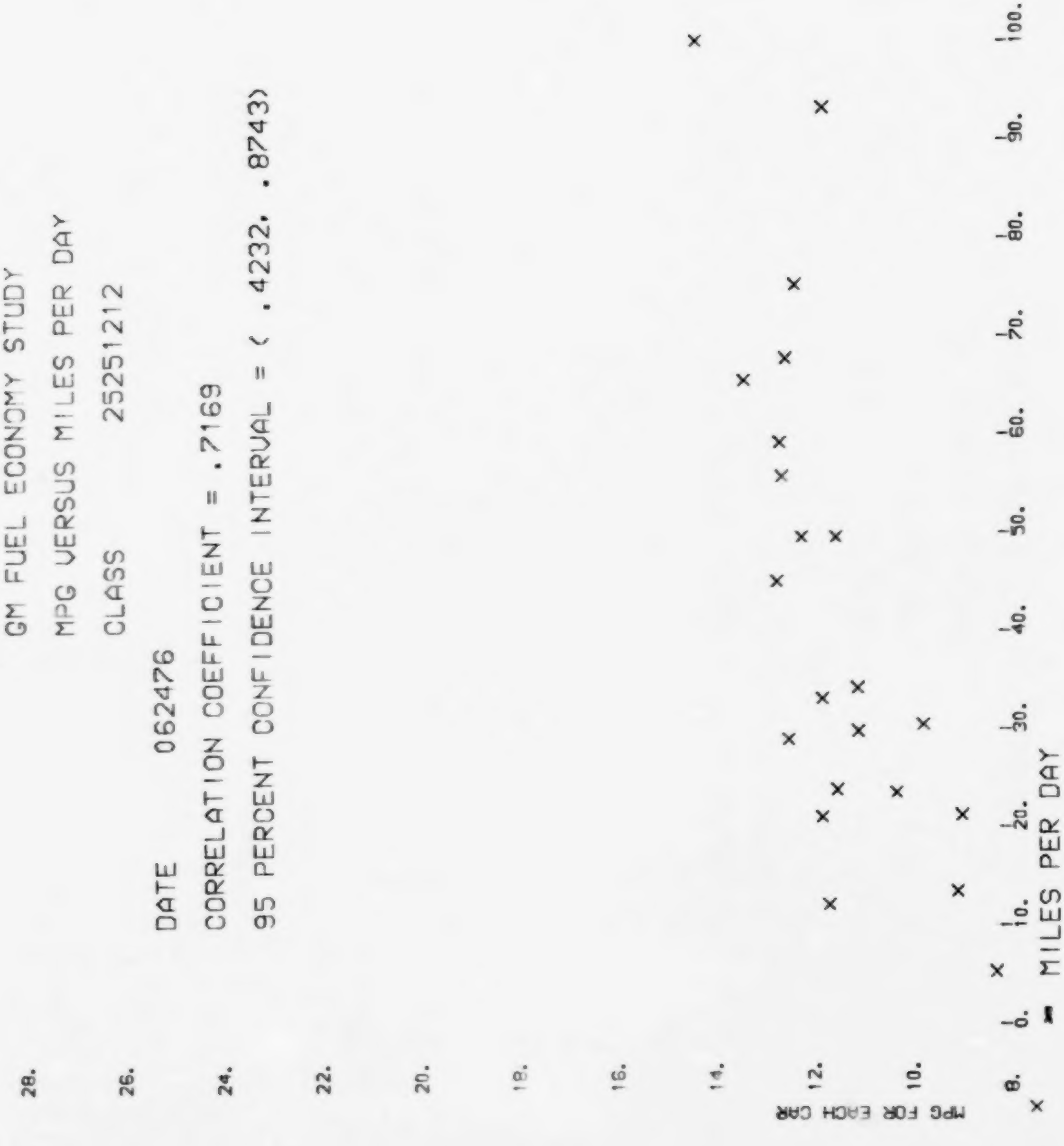


GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 25251212
DATE 062476
CORRELATION COEFFICIENT =-.1840
95 PERCENT CONFIDENCE INTERVAL = (-.5620. .2576)



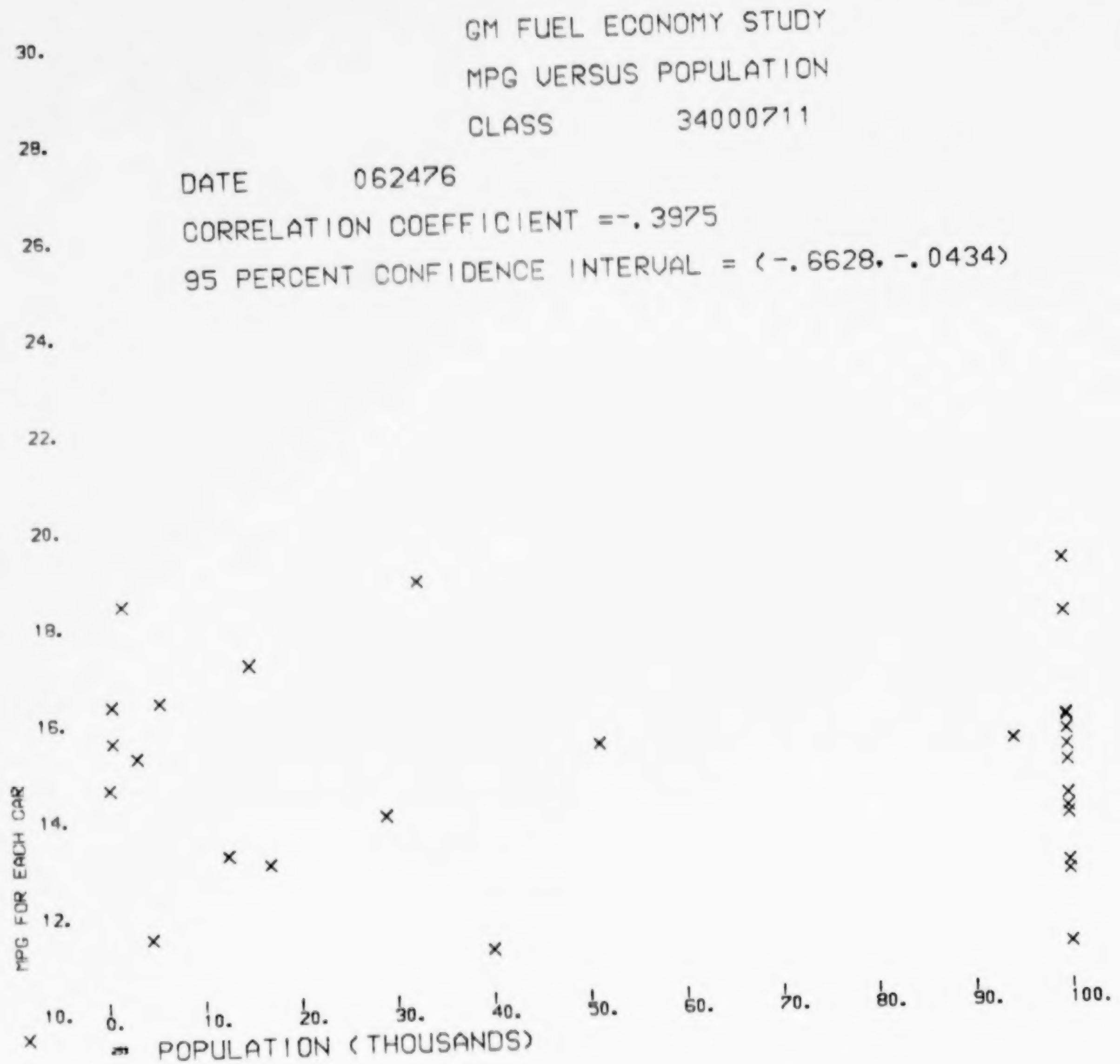
GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 25251212

DATE 062476
CORRELATION COEFFICIENT = .3207
95 PERCENT CONFIDENCE INTERVAL = (-.1167. .6539)



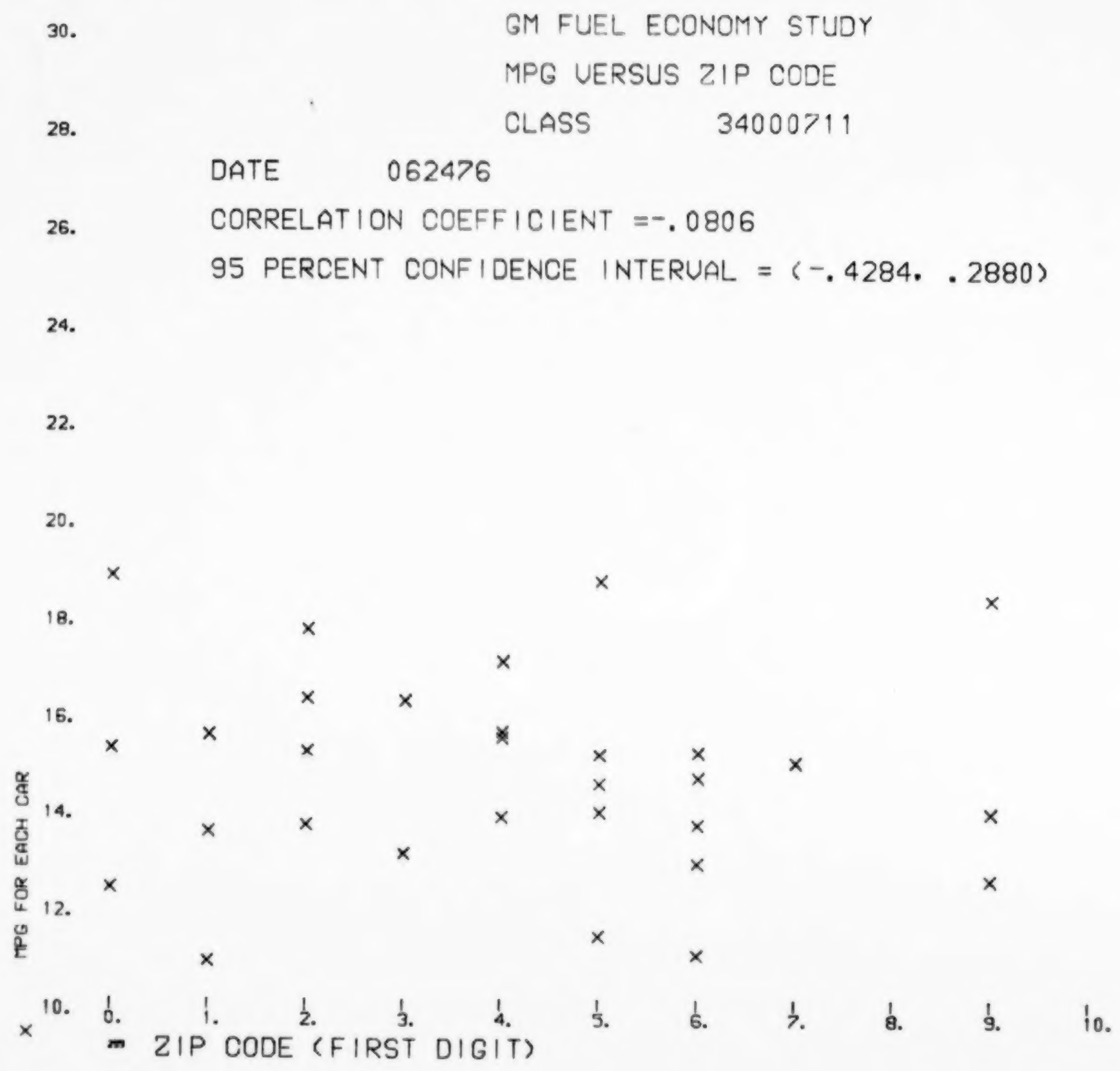
GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 25251212

DATE 062476
CORRELATION COEFFICIENT = .7169
95 PERCENT CONFIDENCE INTERVAL = (.4232, .8743)

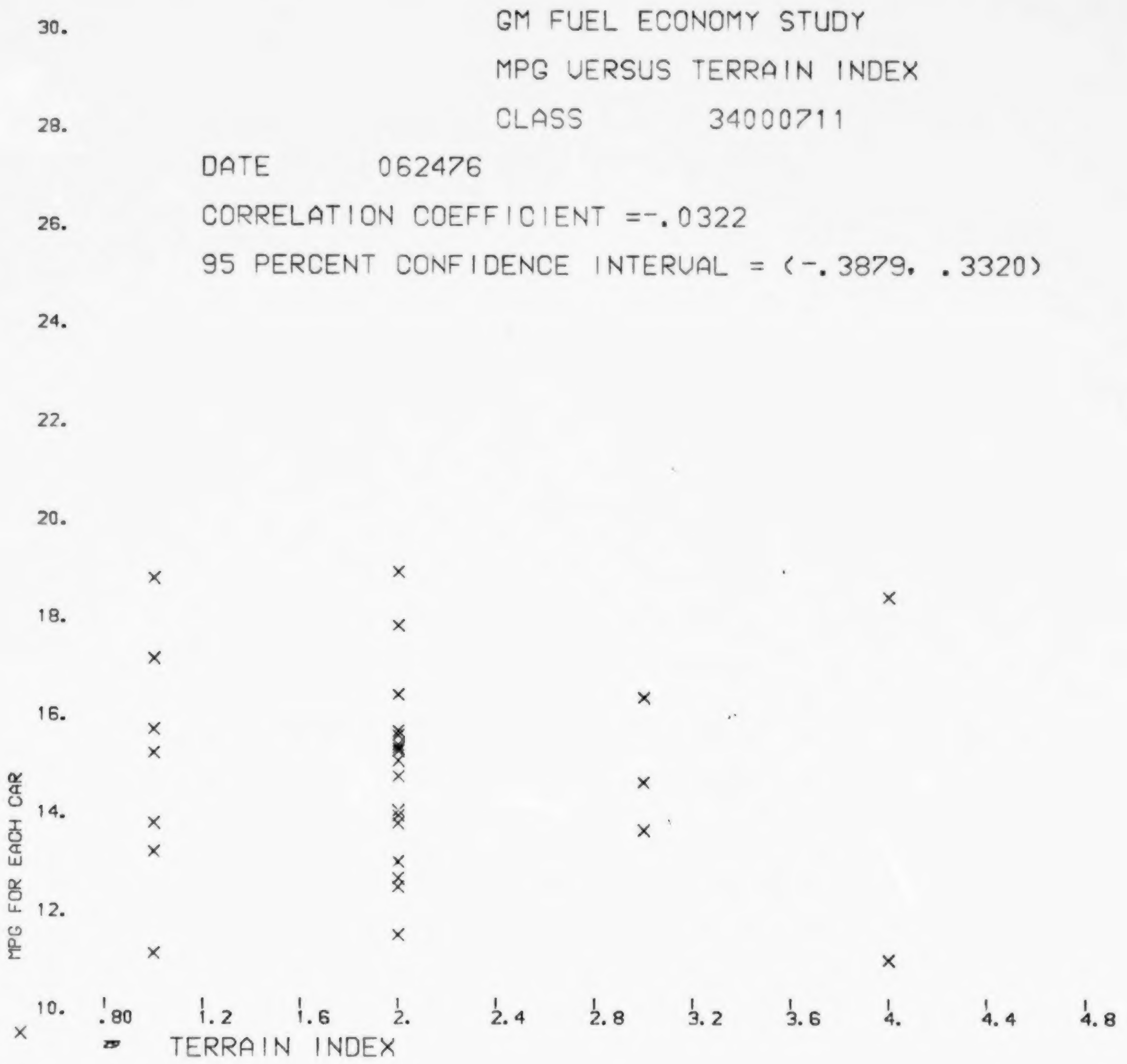


GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 34000711

DATE 062476
CORRELATION COEFFICIENT =-.3975
95 PERCENT CONFIDENCE INTERVAL = (-.6628,-.0434)

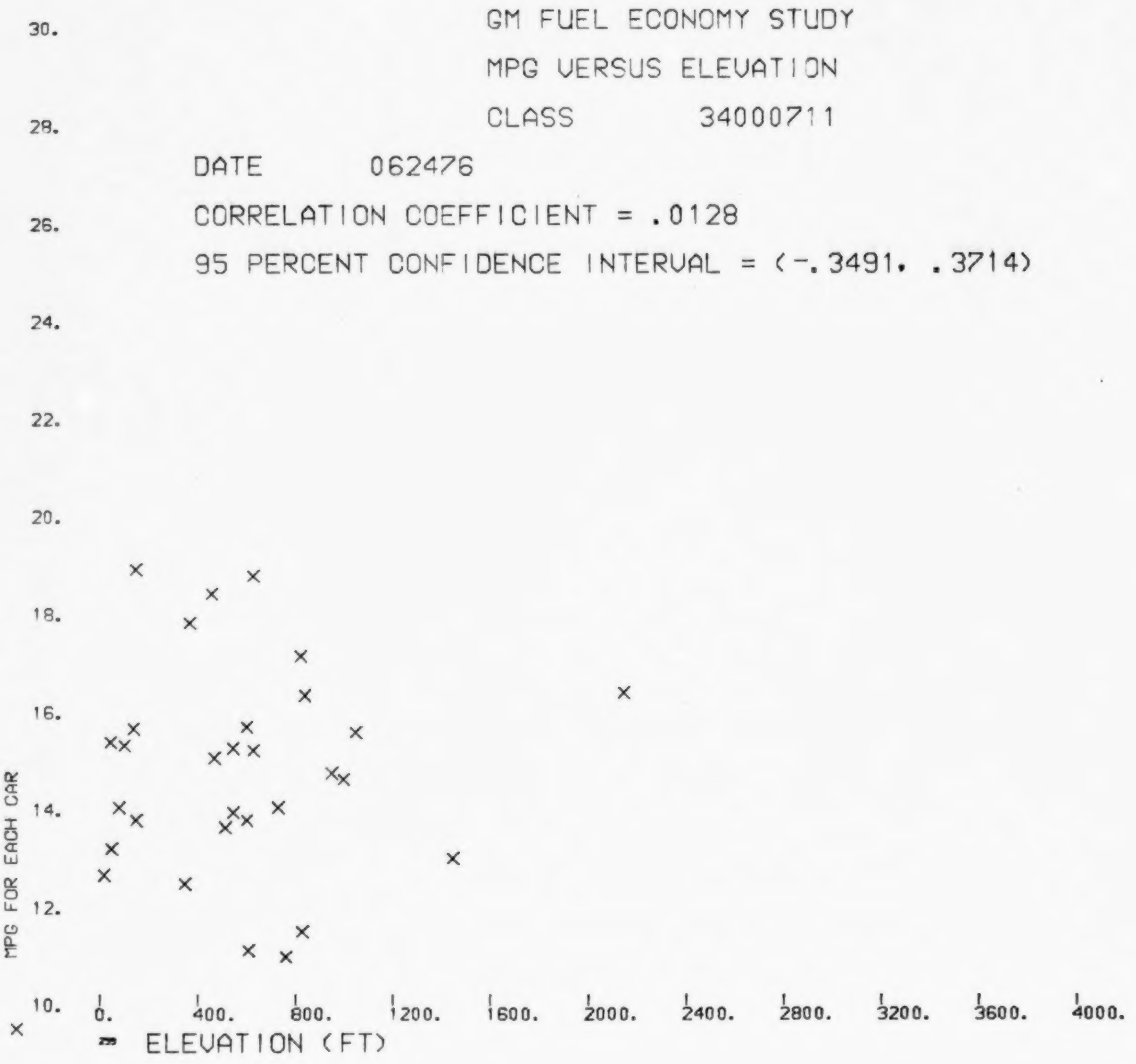


GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 34000711
DATE 062476
CORRELATION COEFFICIENT =-.0806
95 PERCENT CONFIDENCE INTERVAL = (-.4284. .2880)



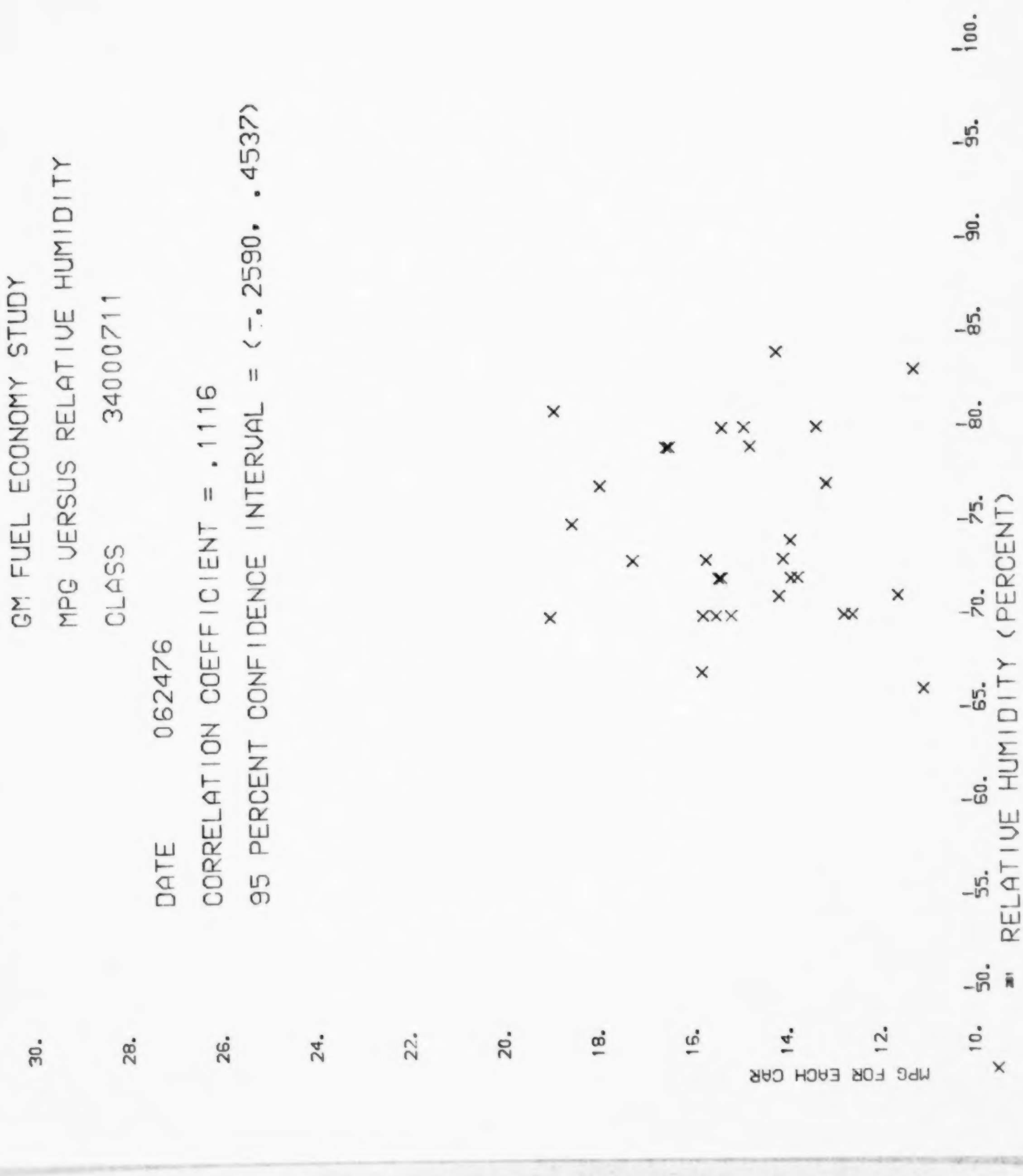
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 34000711

DATE 062476
CORRELATION COEFFICIENT =-.0322
95 PERCENT CONFIDENCE INTERVAL = (-.3879, .3320)



GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 34000711

DATE 062476
CORRELATION COEFFICIENT = .0128
95 PERCENT CONFIDENCE INTERVAL = (-.3491, .3714)



GM FUEL ECONOMY STUDY

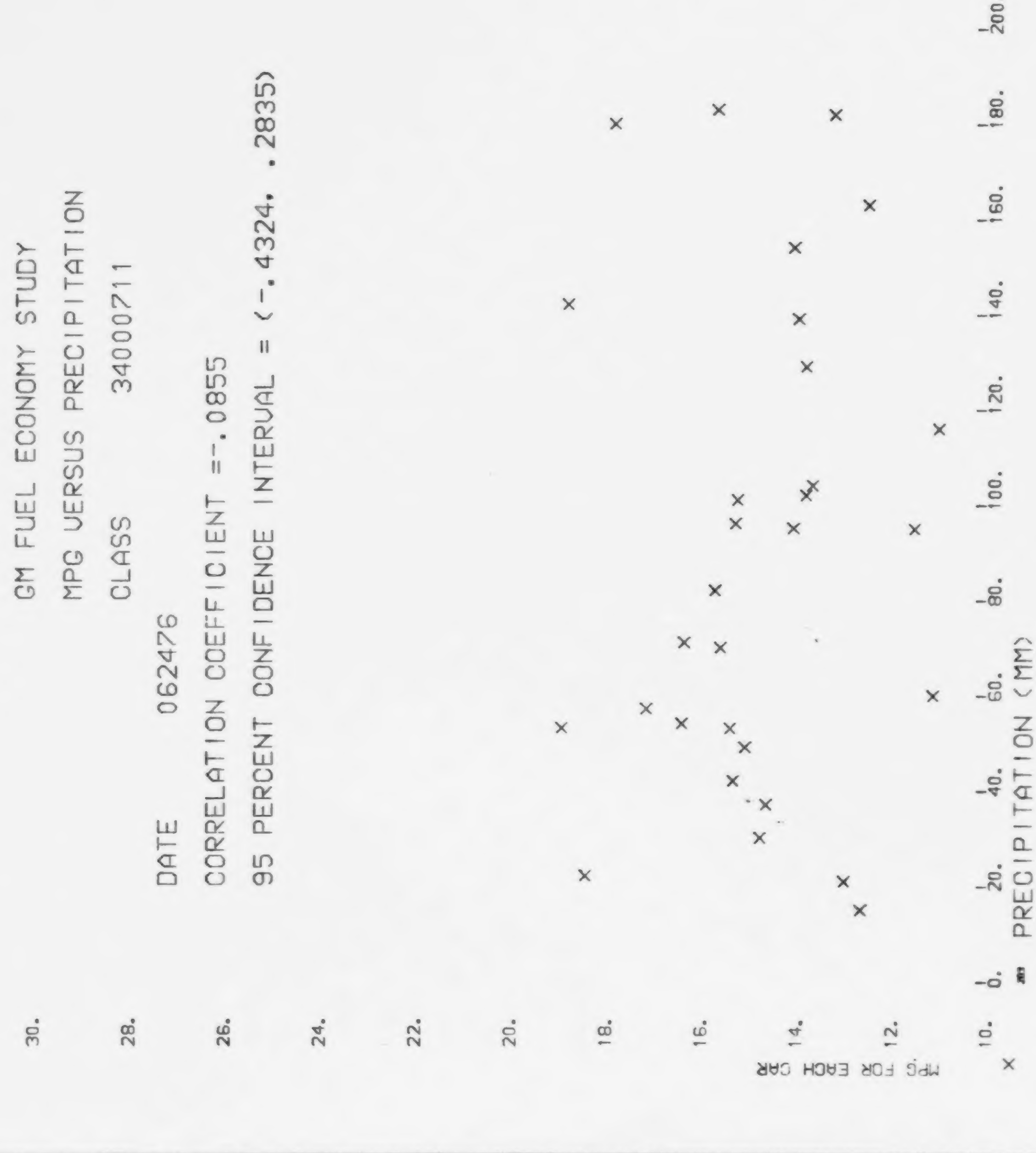
MPG VERSUS RELATIVE HUMIDITY

CLASS 34000711

DATE 062476

CORRELATION COEFFICIENT = .1116

95 PERCENT CONFIDENCE INTERVAL = (-.2590, .4537)



GM FUEL ECONOMY STUDY

MPG VERSUS PRECIPITATION

CLASS 34000711

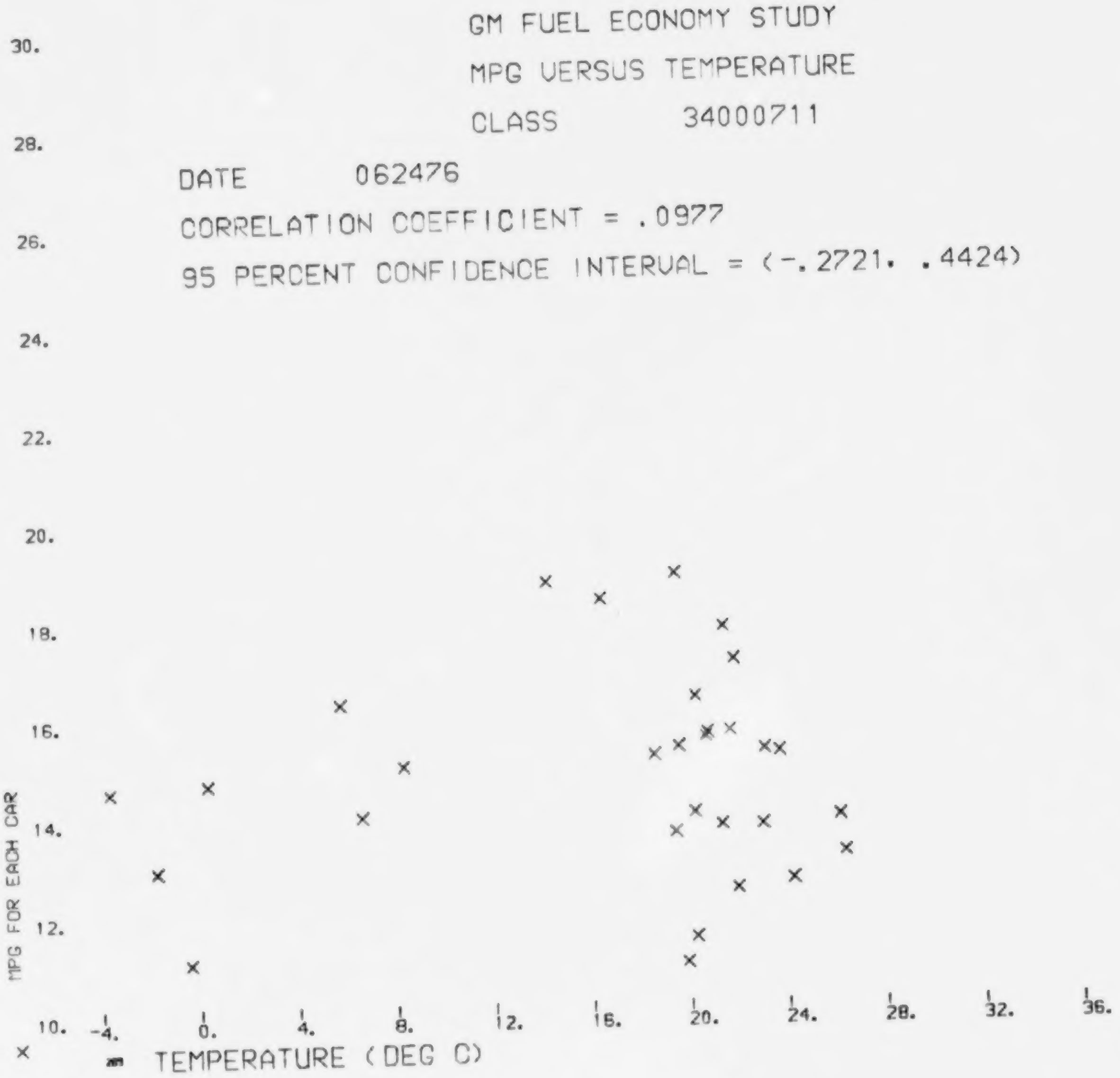
DATE 062476

CORRELATION COEFFICIENT =-.0855

95 PERCENT CONFIDENCE INTERVAL = (-.4324, .2835)

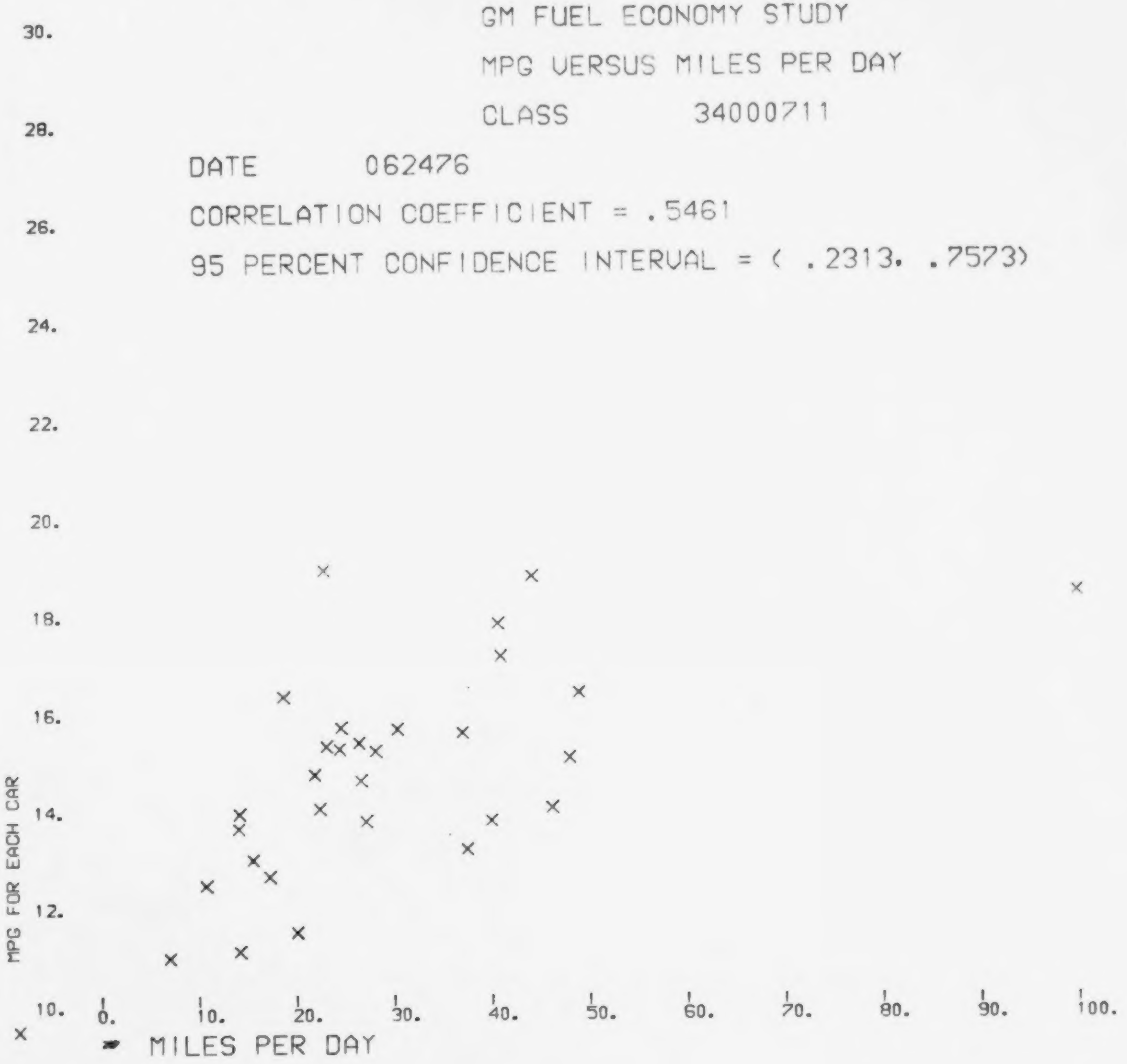
GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 34000711

DATE 062476
CORRELATION COEFFICIENT = .0977
95 PERCENT CONFIDENCE INTERVAL = (-.2721. .4424)



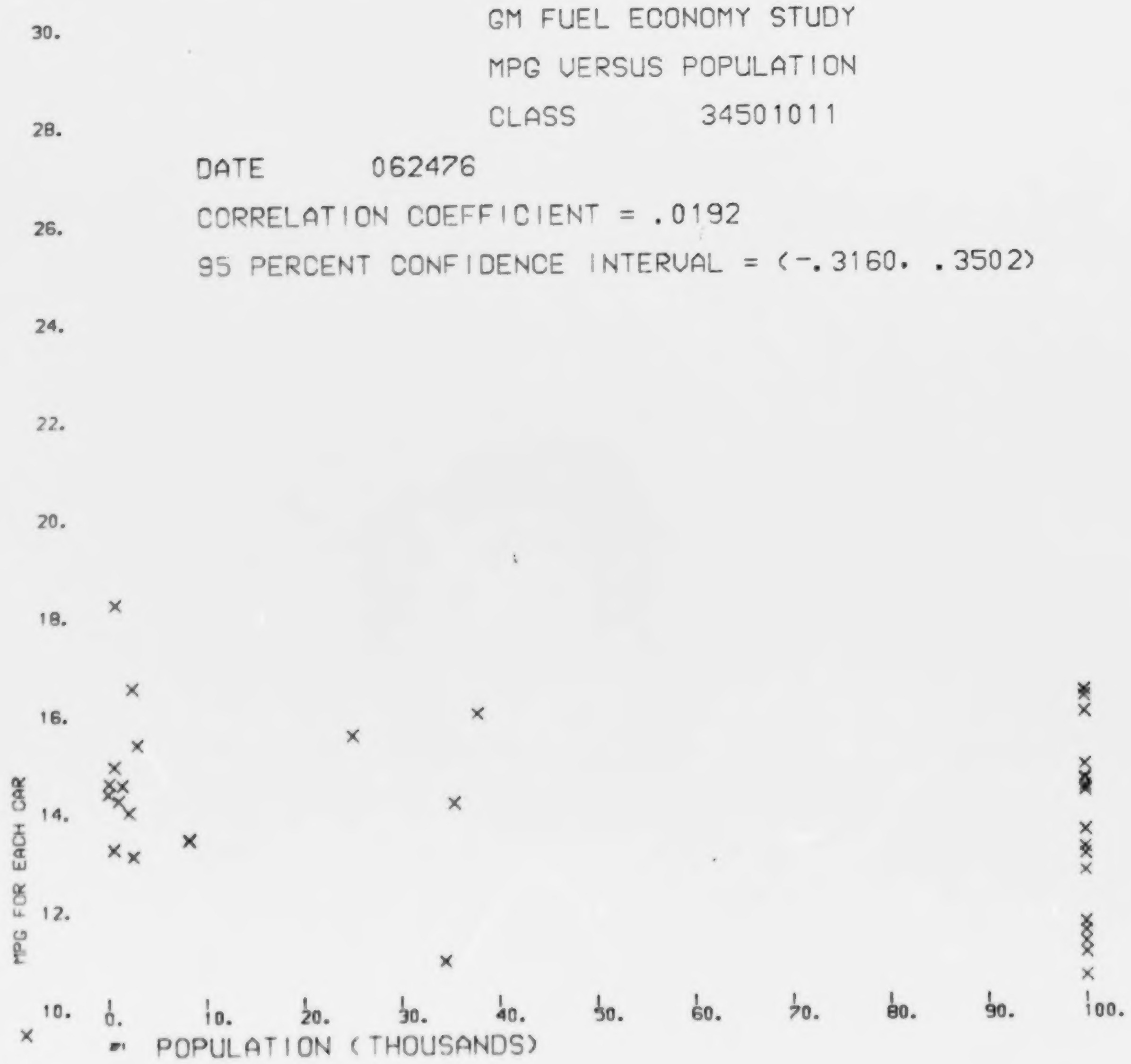
GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 34000711

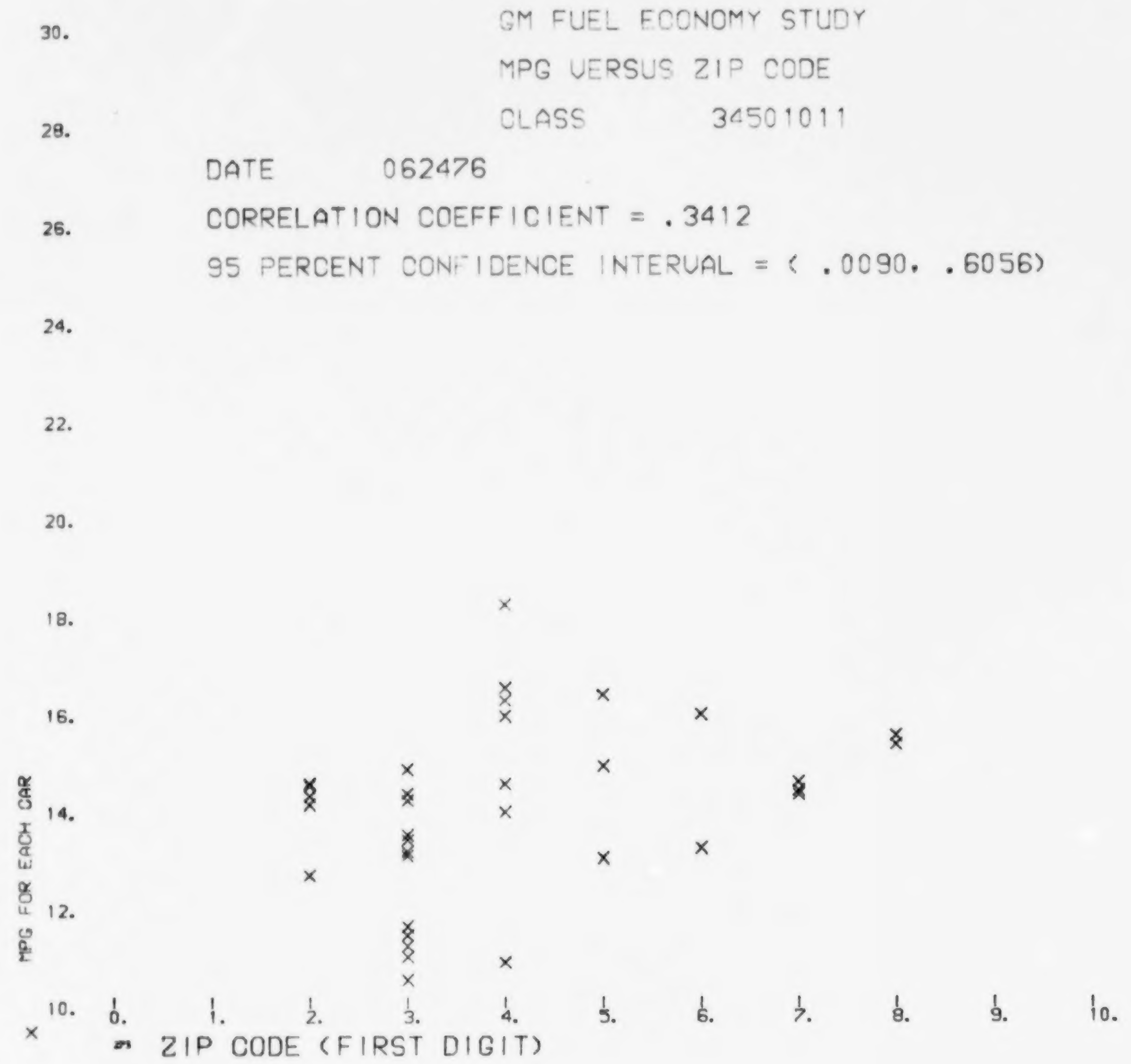
DATE 062476
CORRELATION COEFFICIENT = .5461
95 PERCENT CONFIDENCE INTERVAL = (.2313. .7573)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 34501011

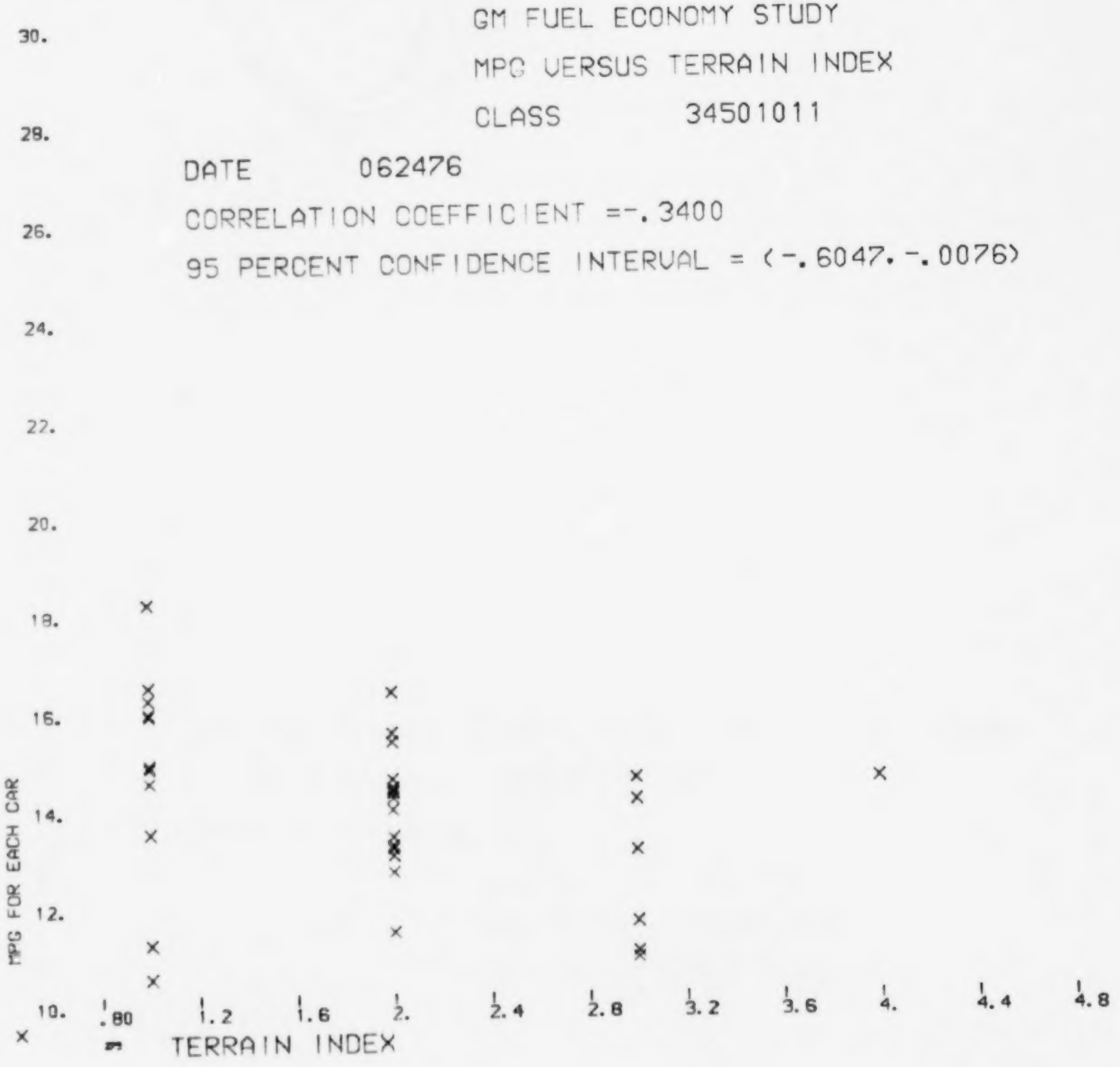
DATE 062476
CORRELATION COEFFICIENT = .0192
95 PERCENT CONFIDENCE INTERVAL = (-.3160. .3502)





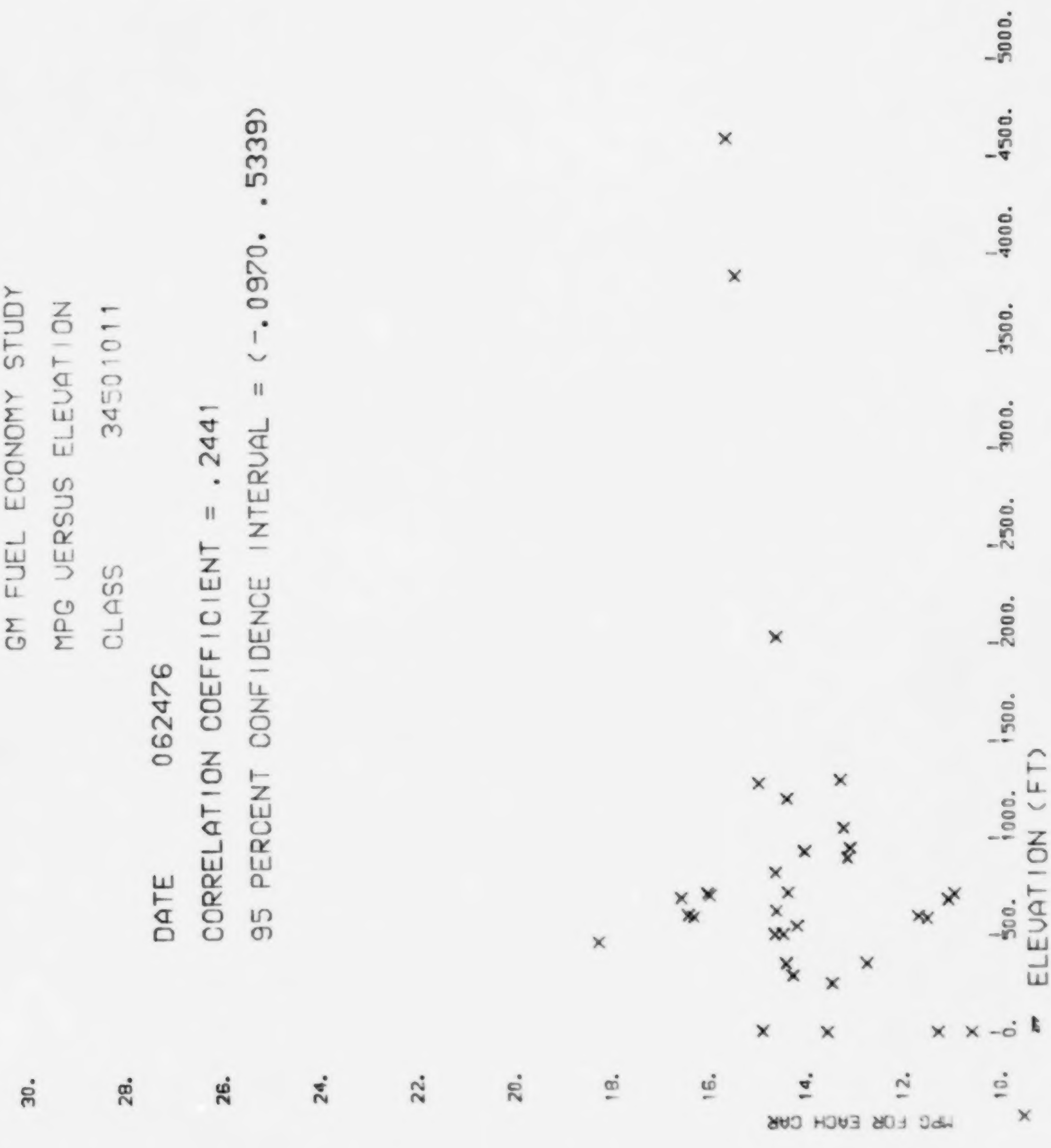
GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 34501011

DATE 062476
CORRELATION COEFFICIENT = .3412
95 PERCENT CONFIDENCE INTERVAL = (.0090, .6056)



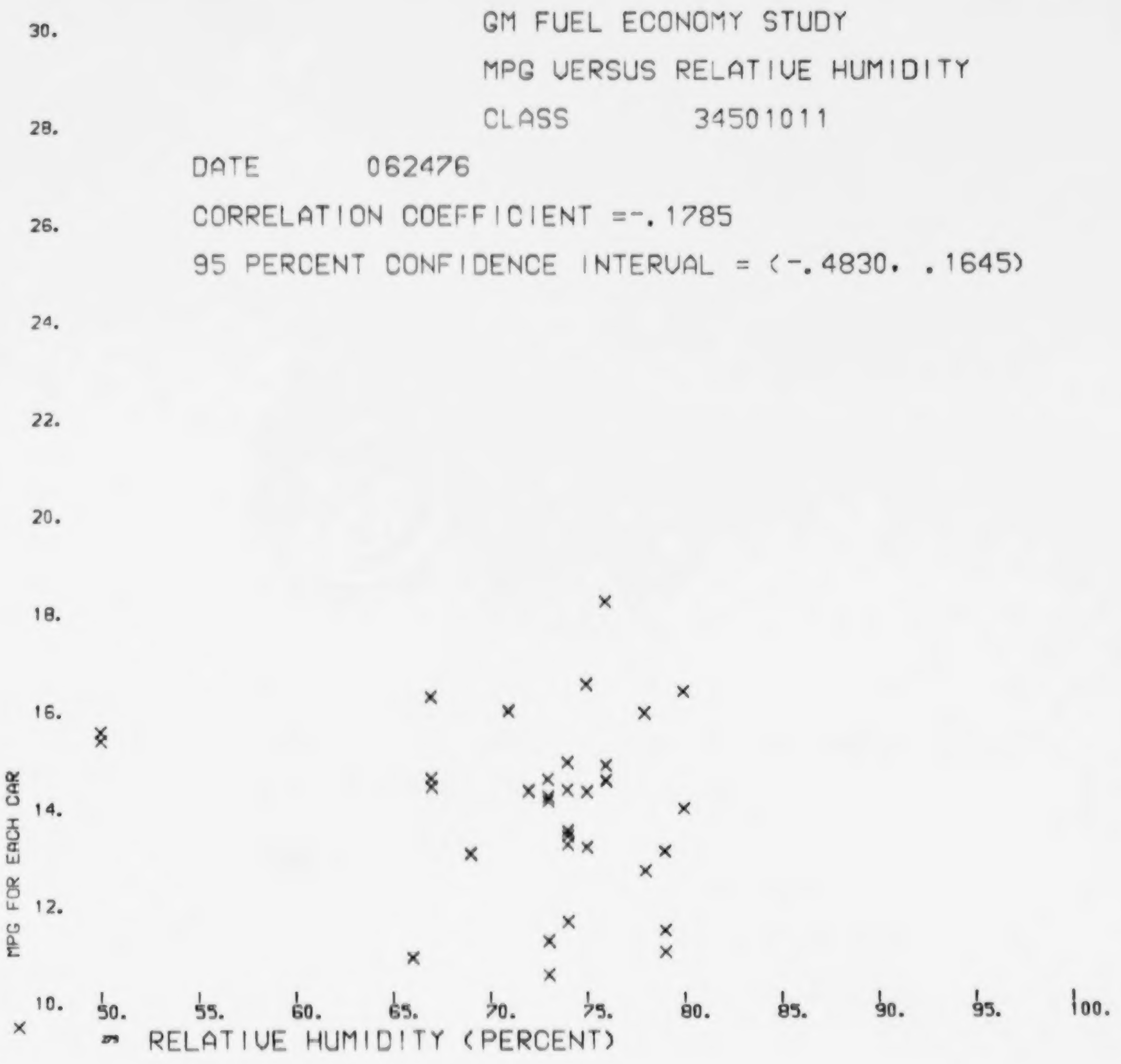
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 34501011

DATE 062476
CORRELATION COEFFICIENT =-.3400
95 PERCENT CONFIDENCE INTERVAL = (-.6047.-.0076)

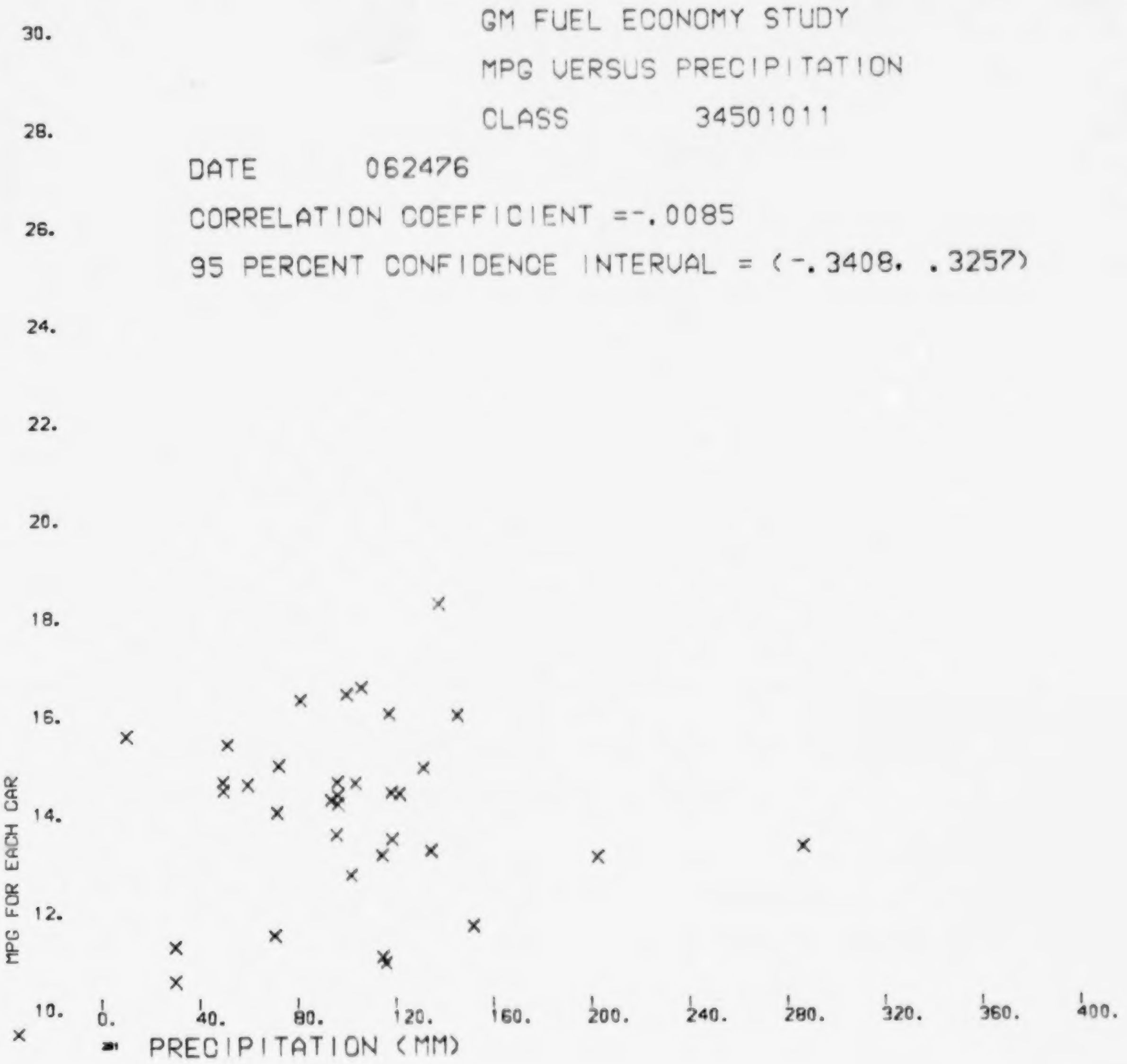


GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 34501011

DATE 062476
CORRELATION COEFFICIENT = .2441
95 PERCENT CONFIDENCE INTERVAL = (-.0970, .5339)



GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 34501011
DATE 062476
CORRELATION COEFFICIENT =-.1785
95 PERCENT CONFIDENCE INTERVAL = (-.4830, .1645)



GM FUEL ECONOMY STUDY

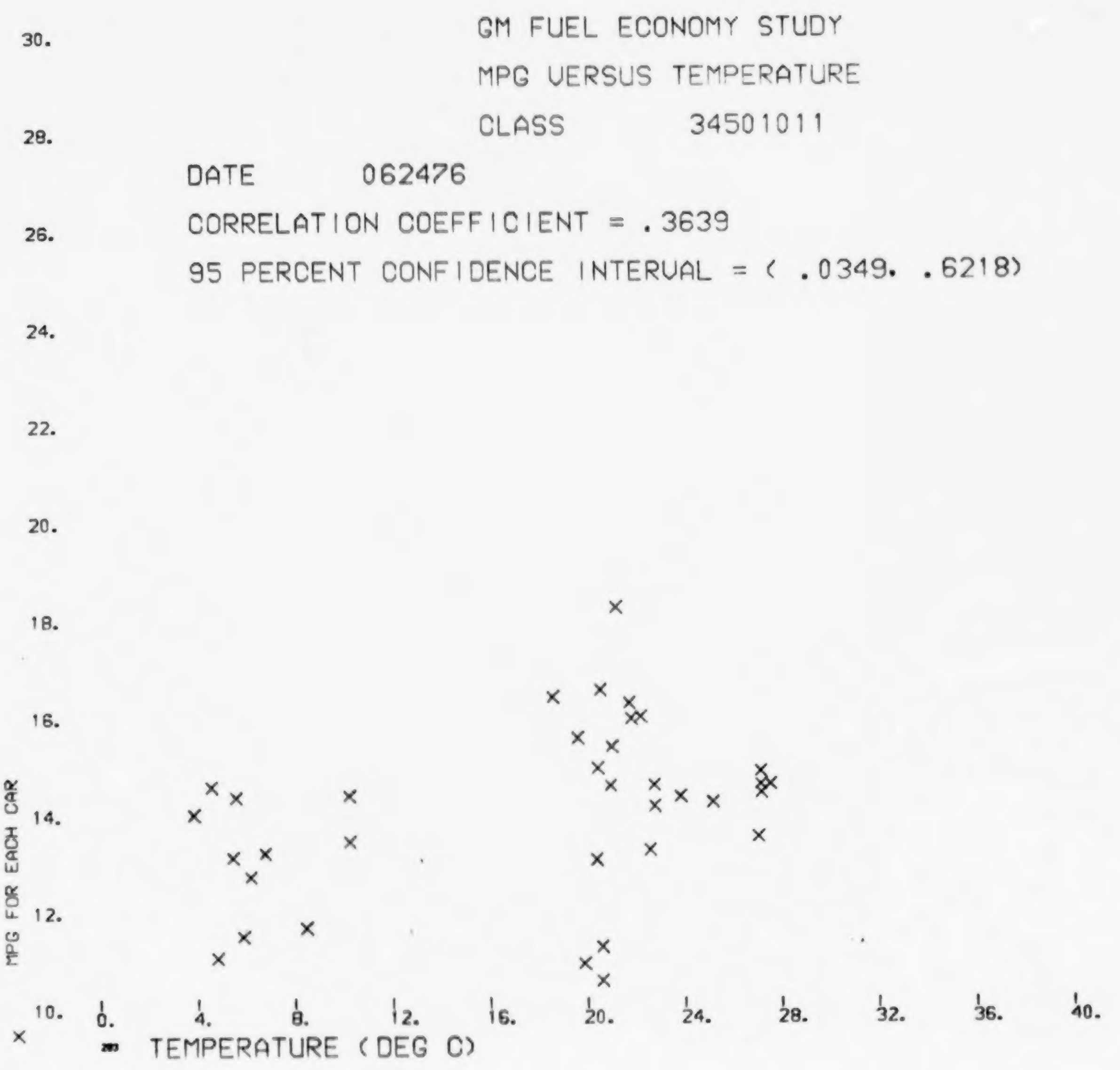
MPG VERSUS PRECIPITATION

CLASS 34501011

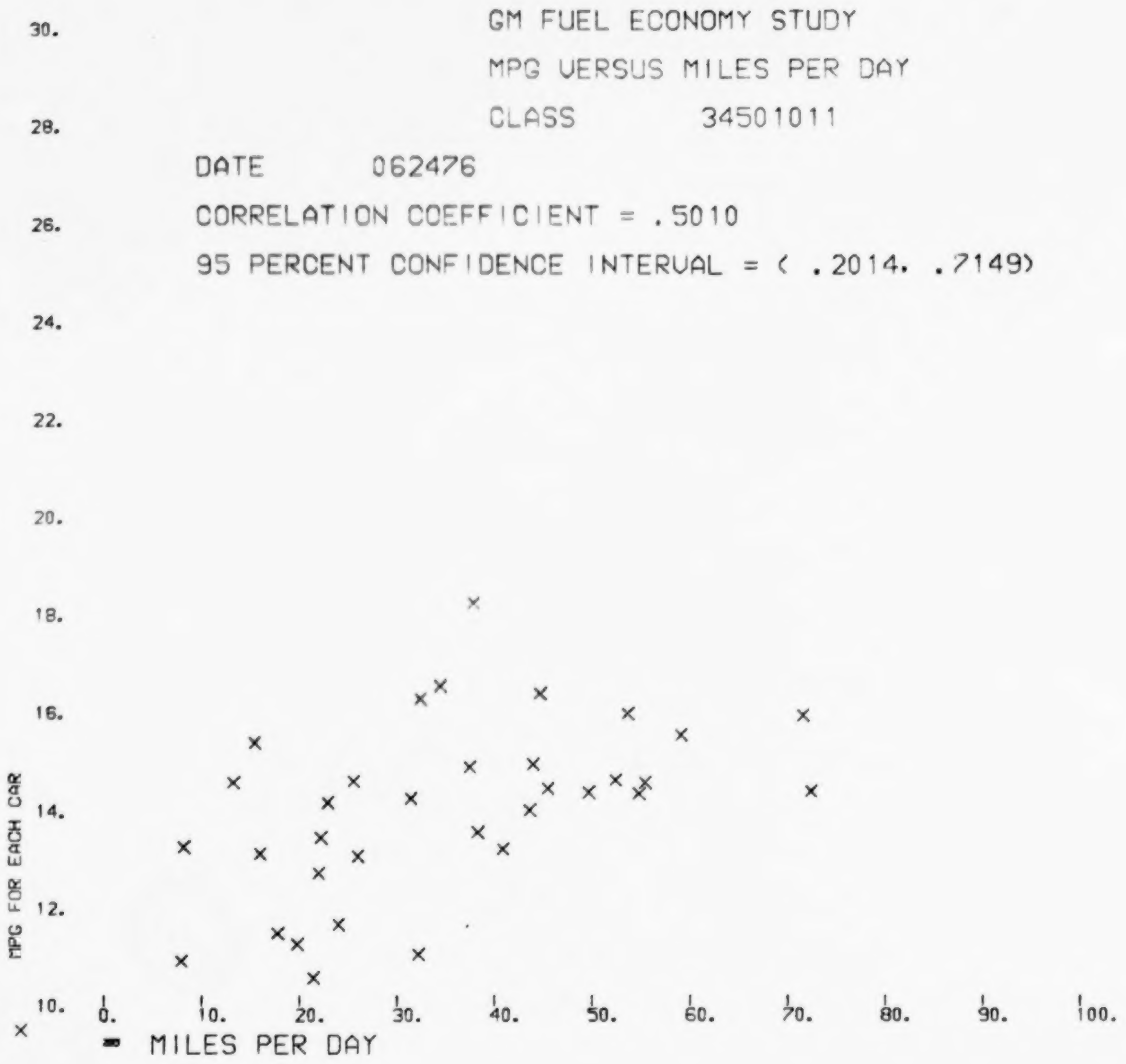
DATE 062476

CORRELATION COEFFICIENT =-.0085

95 PERCENT CONFIDENCE INTERVAL = (-.3408, .3257)



GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 34501011
DATE 062476
CORRELATION COEFFICIENT = .3639
95 PERCENT CONFIDENCE INTERVAL = (.0349. .6218)

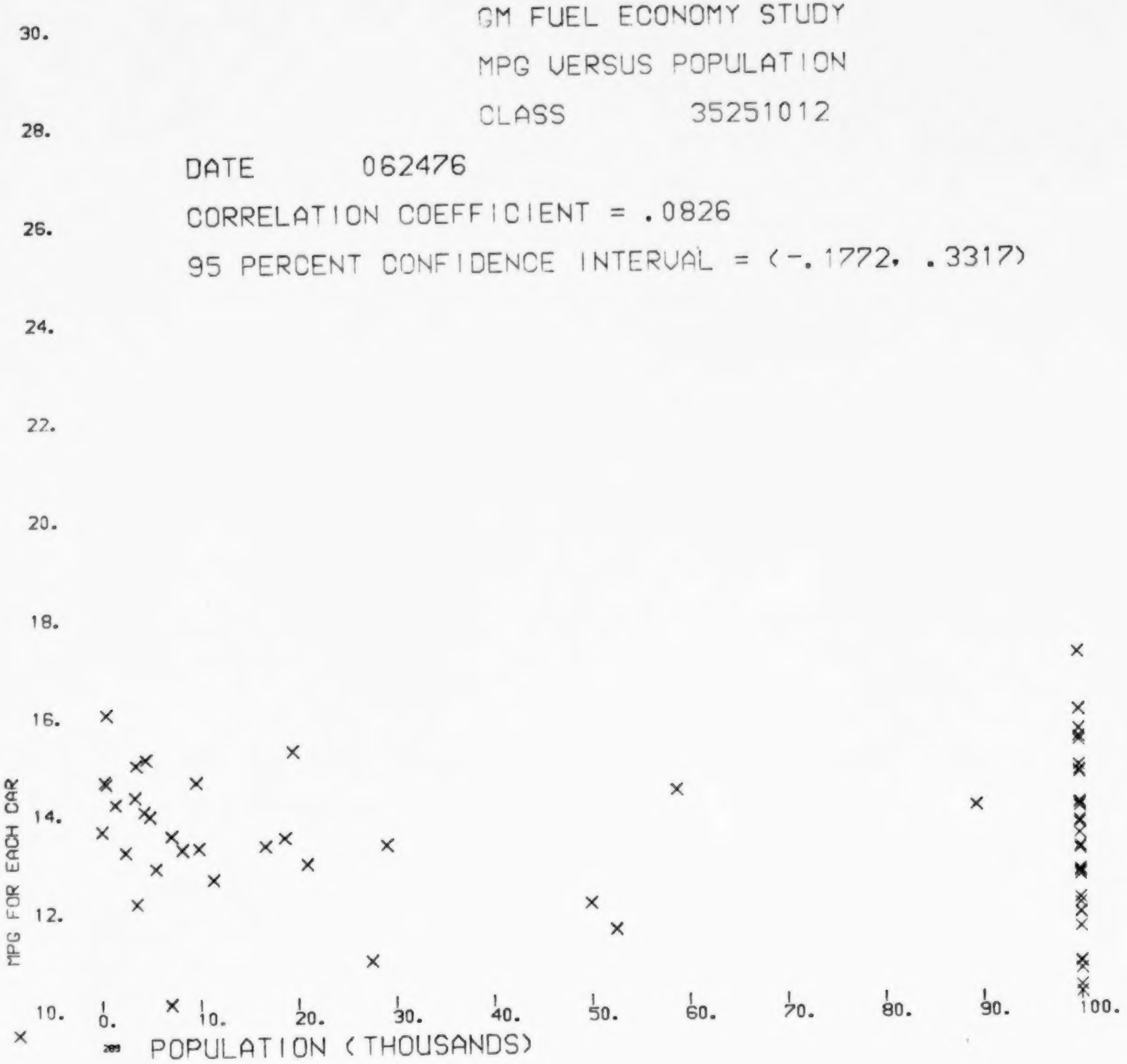


GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 34501011

DATE 062476

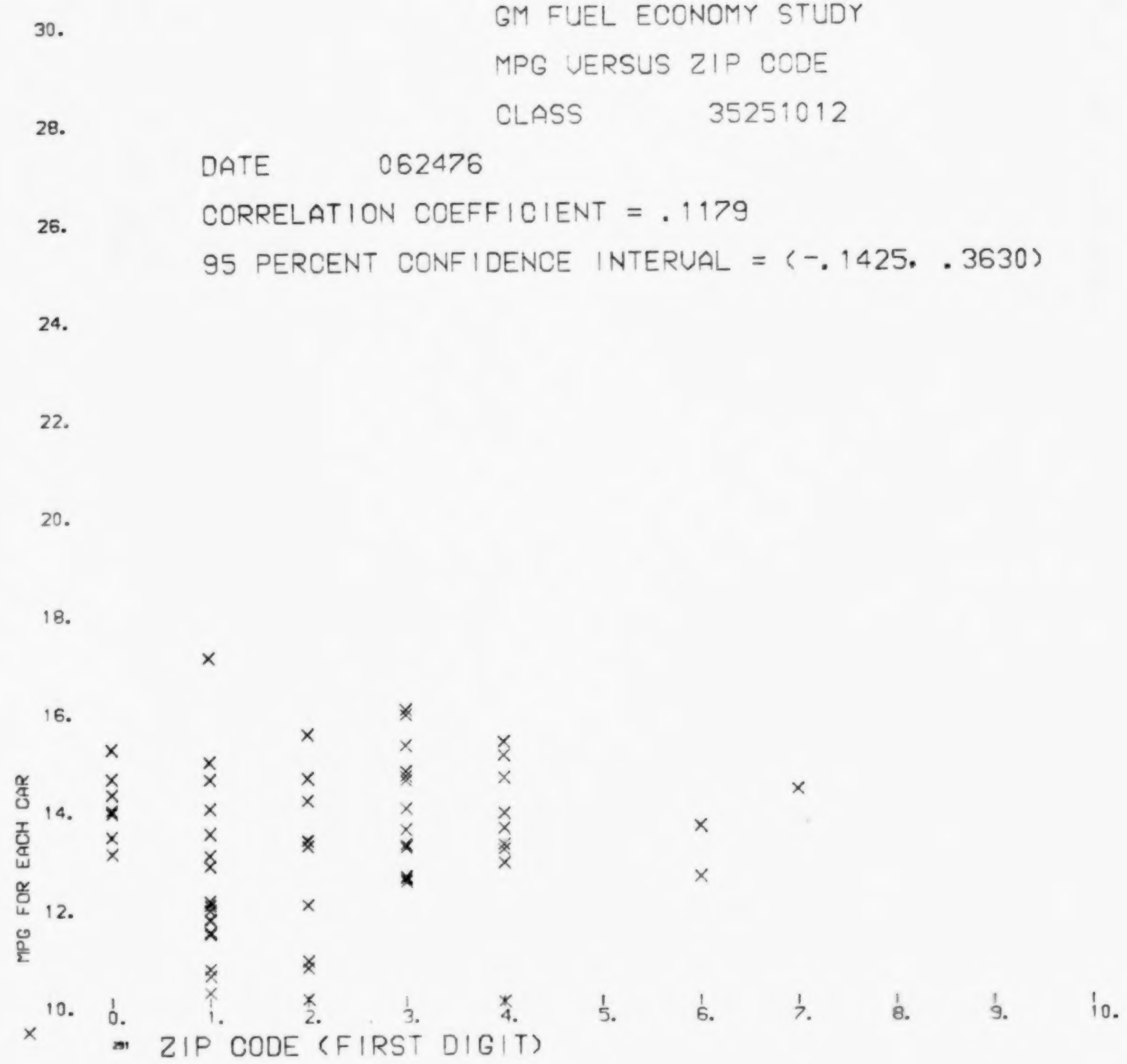
CORRELATION COEFFICIENT = .5010

95 PERCENT CONFIDENCE INTERVAL = (.2014. .7149)



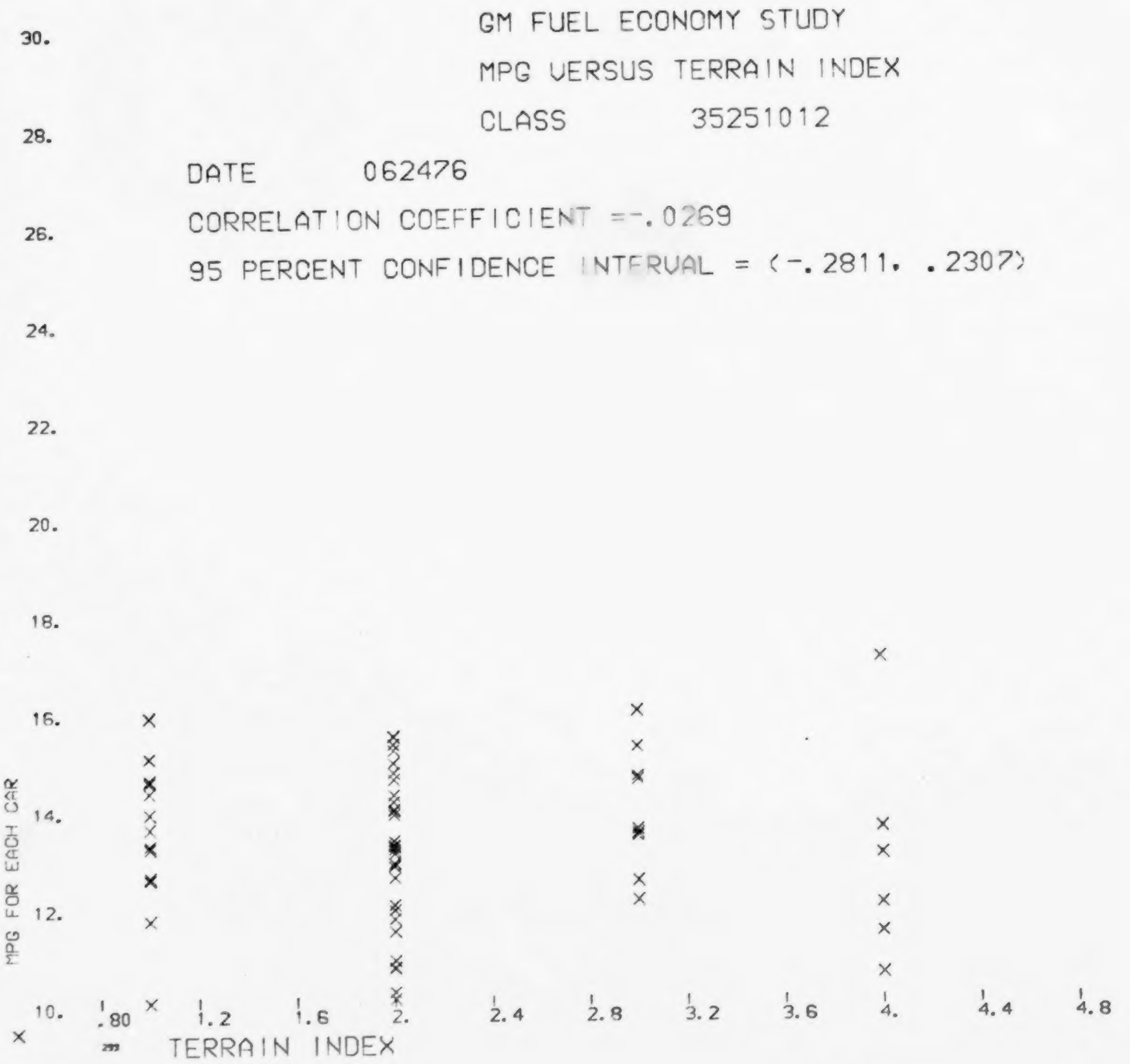
GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 35251012

DATE 062476
CORRELATION COEFFICIENT = .0826
95 PERCENT CONFIDENCE INTERVAL = (-.1772, .3317)



GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 35251012

DATE 062476
CORRELATION COEFFICIENT = .1179
95 PERCENT CONFIDENCE INTERVAL = (-.1425. .3630)

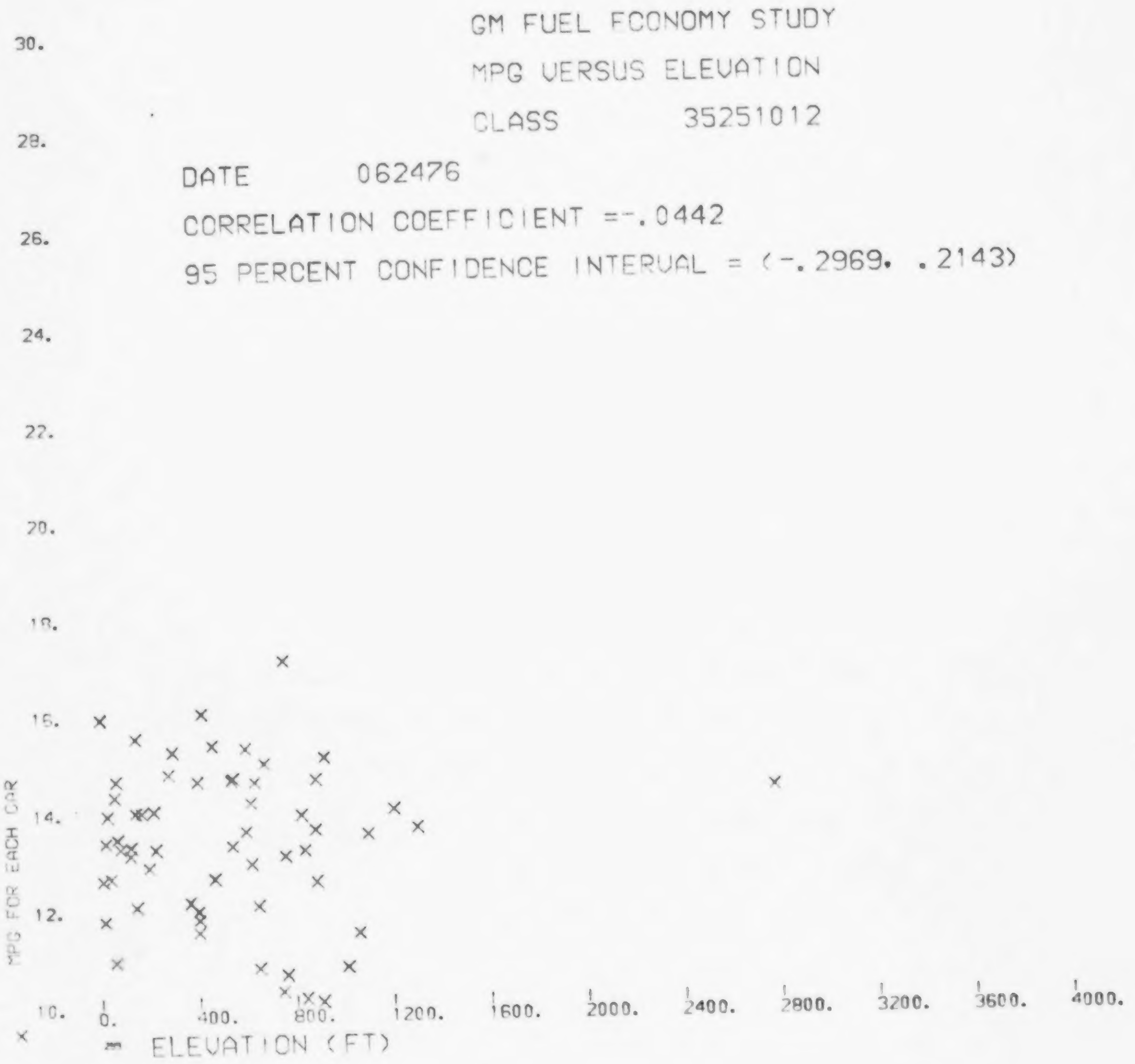


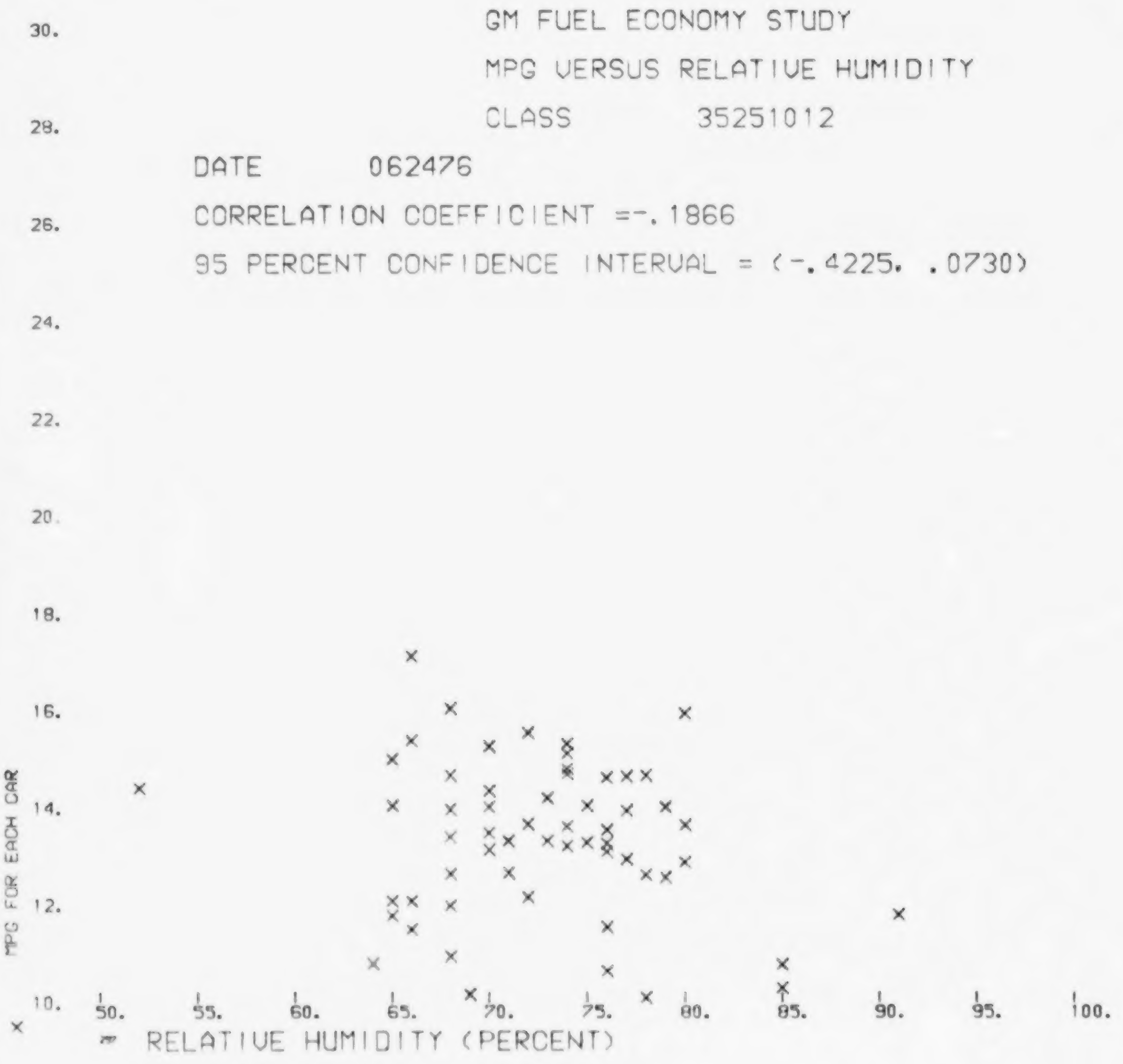
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 35251012

DATE 062476
CORRELATION COEFFICIENT =-.0269
95 PERCENT CONFIDENCE INTERVAL = (-.2811. .2307)

GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 35251012

DATE 062476
CORRELATION COEFFICIENT =-.0442
95 PERCENT CONFIDENCE INTERVAL = (-.2969. .2143)





GM FUEL ECONOMY STUDY

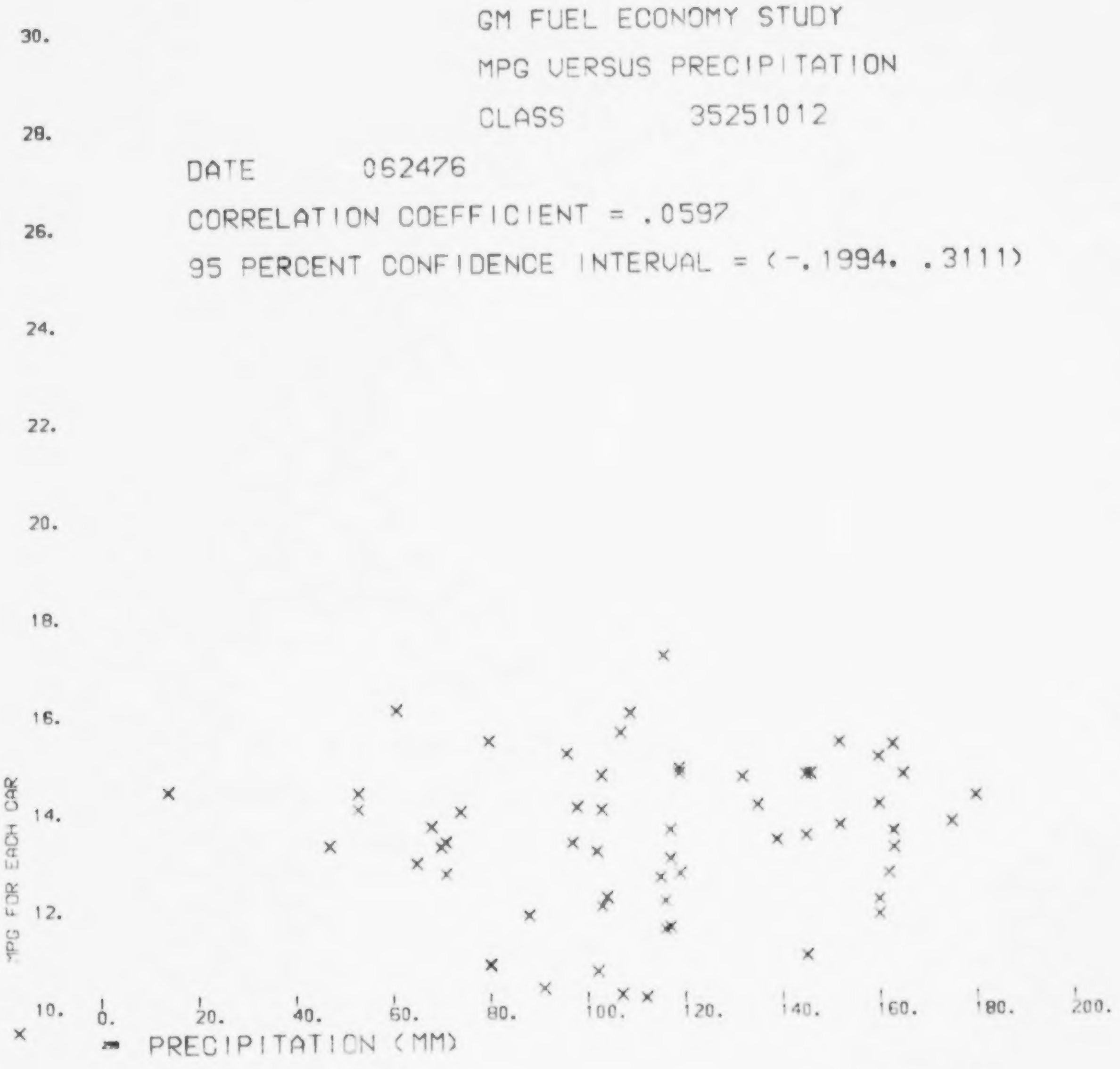
MPG VERSUS RELATIVE HUMIDITY

CLASS 35251012

DATE 062476

CORRELATION COEFFICIENT =-.1866

95 PERCENT CONFIDENCE INTERVAL = (-.4225. .0730)



GM FUEL ECONOMY STUDY

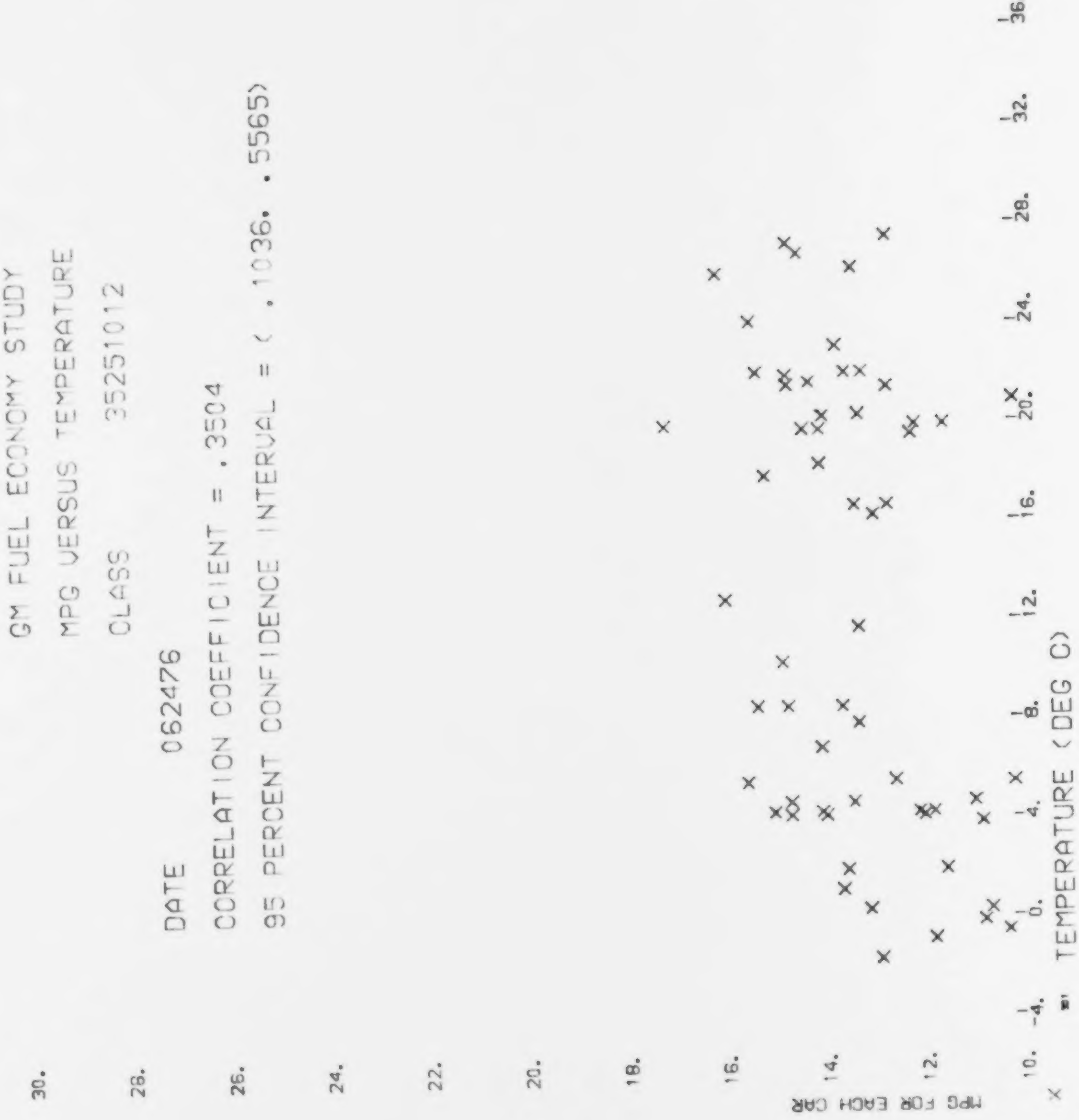
MPG VERSUS PRECIPITATION

CLASS 35251012

DATE 062476

CORRELATION COEFFICIENT = .0597

95 PERCENT CONFIDENCE INTERVAL = (-.1994. .3111)

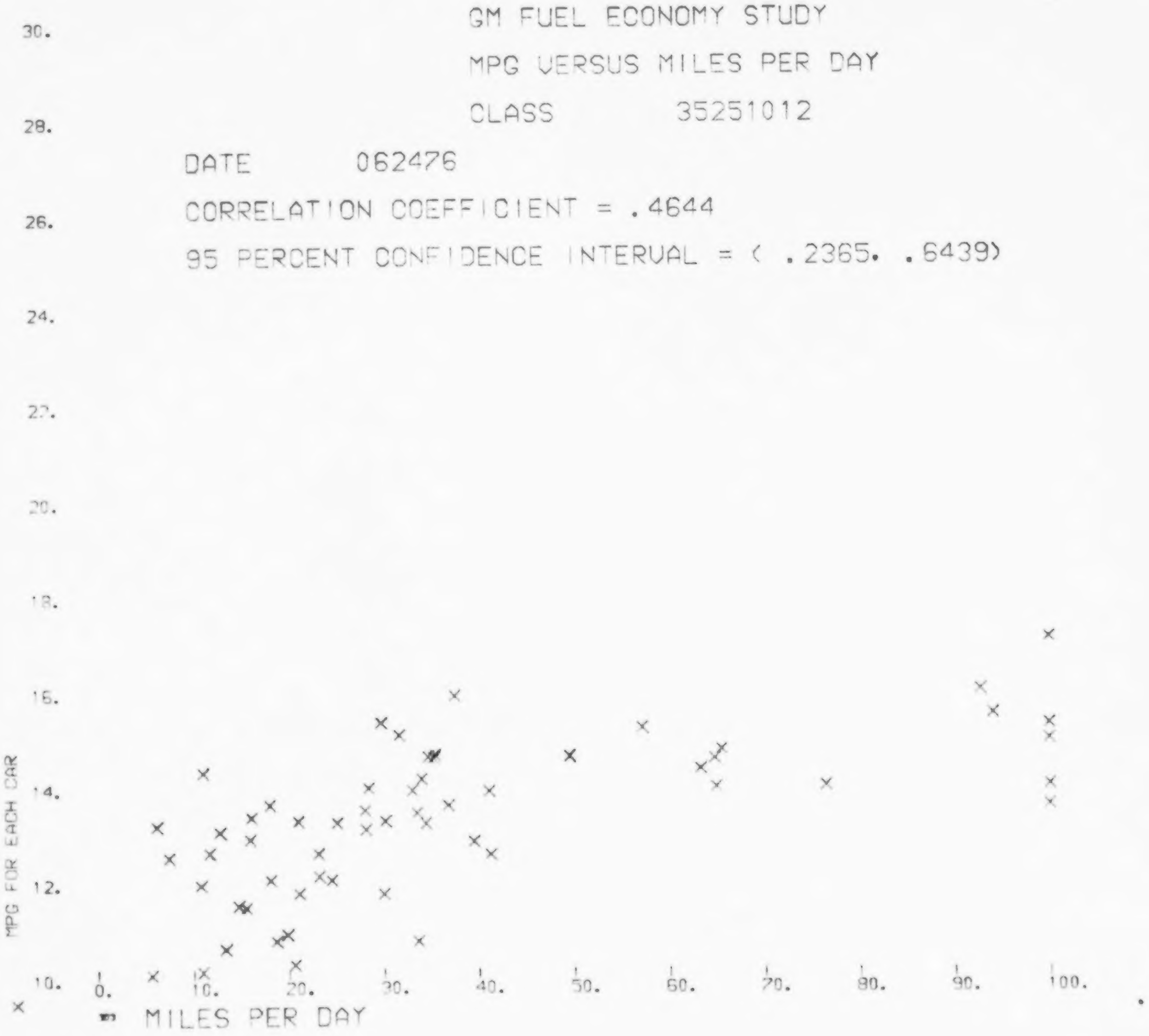


GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 35251012

DATE 062476

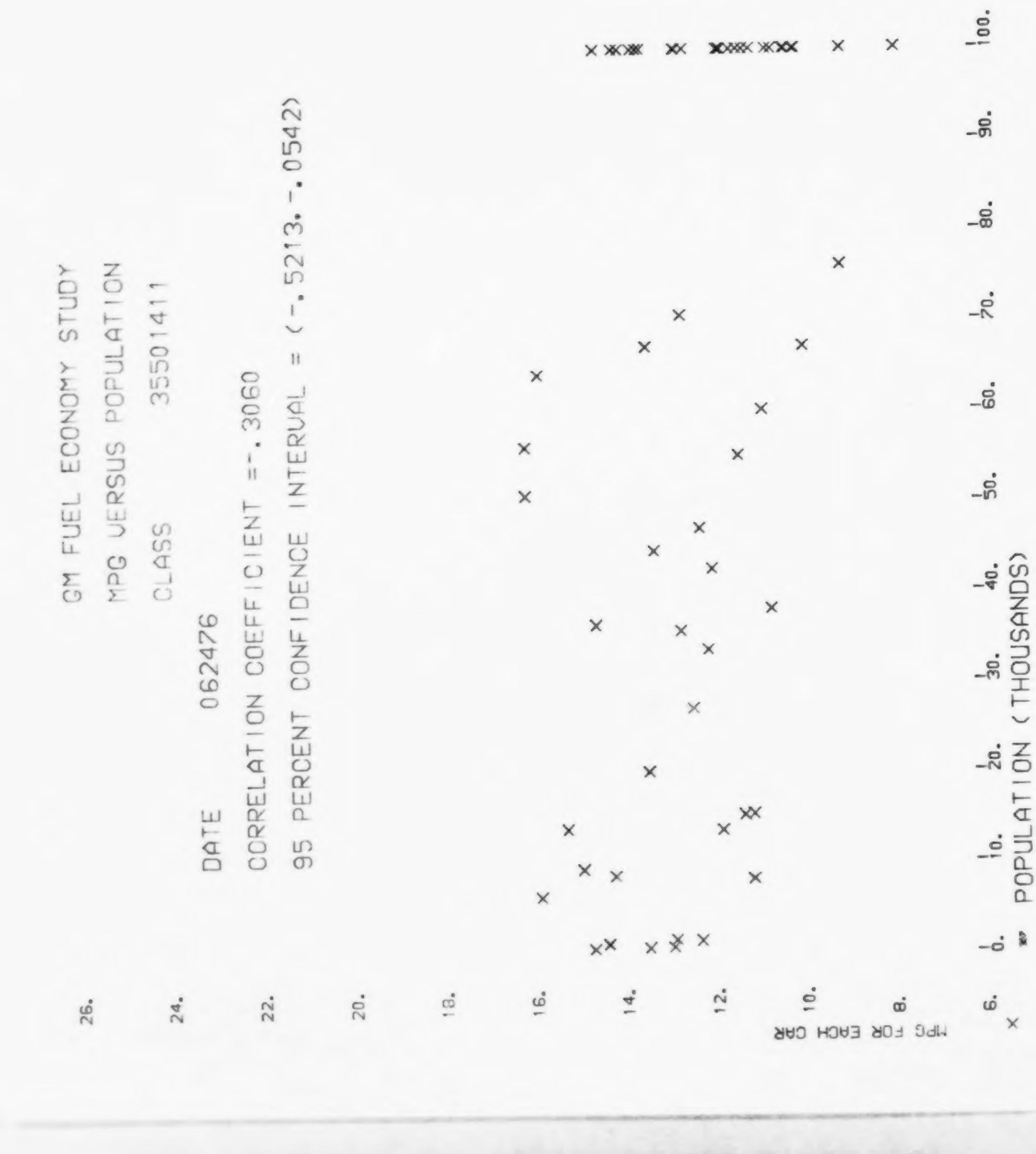
CORRELATION COEFFICIENT = .3504

95 PERCENT CONFIDENCE INTERVAL = (.1036, .5565)



GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 35251012

DATE 062476
CORRELATION COEFFICIENT = .4644
95 PERCENT CONFIDENCE INTERVAL = (.2365. .6439)



GM FUEL ECONOMY STUDY

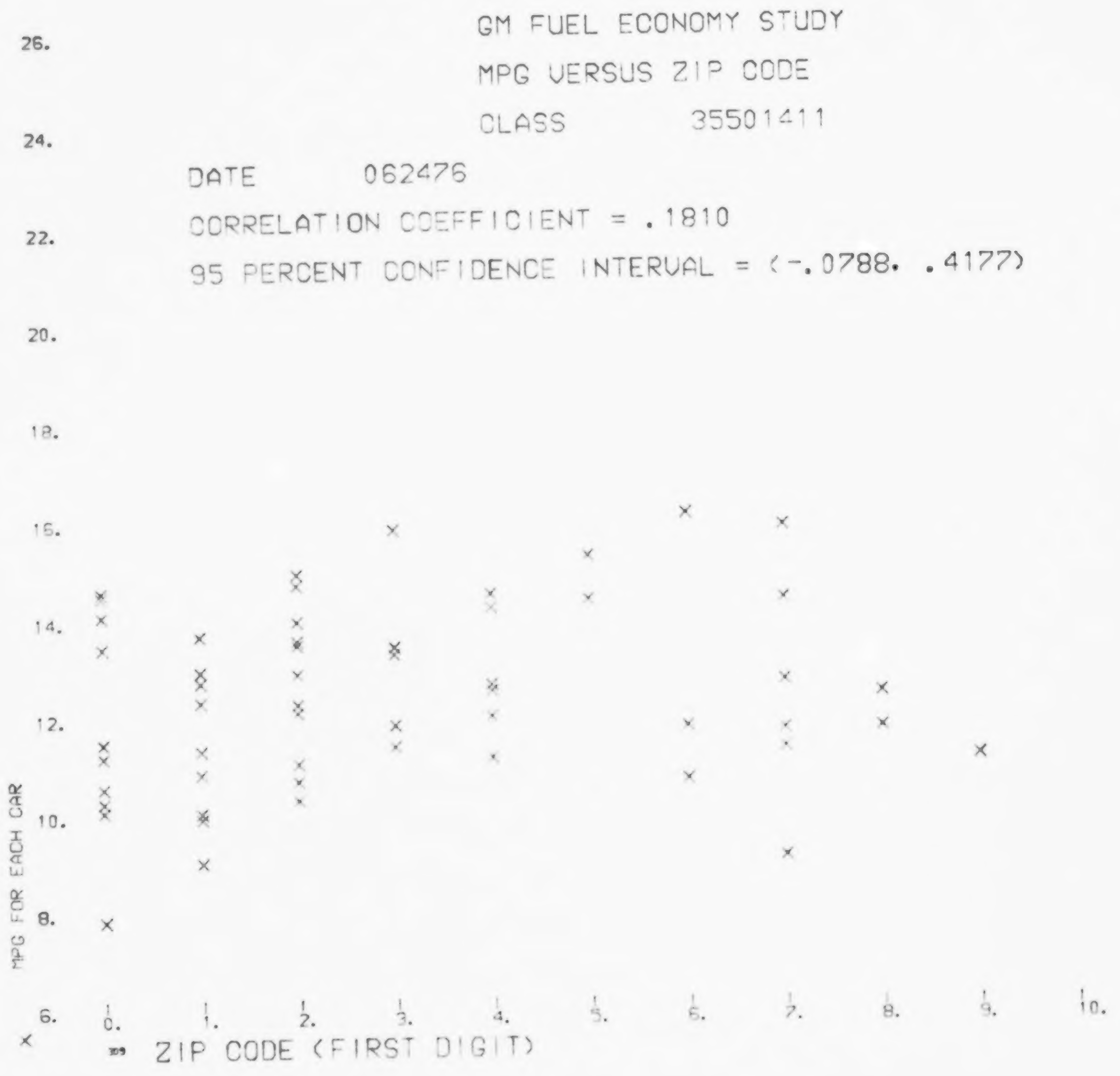
MPG VERSUS POPULATION

CLASS 35501411

DATE 062476

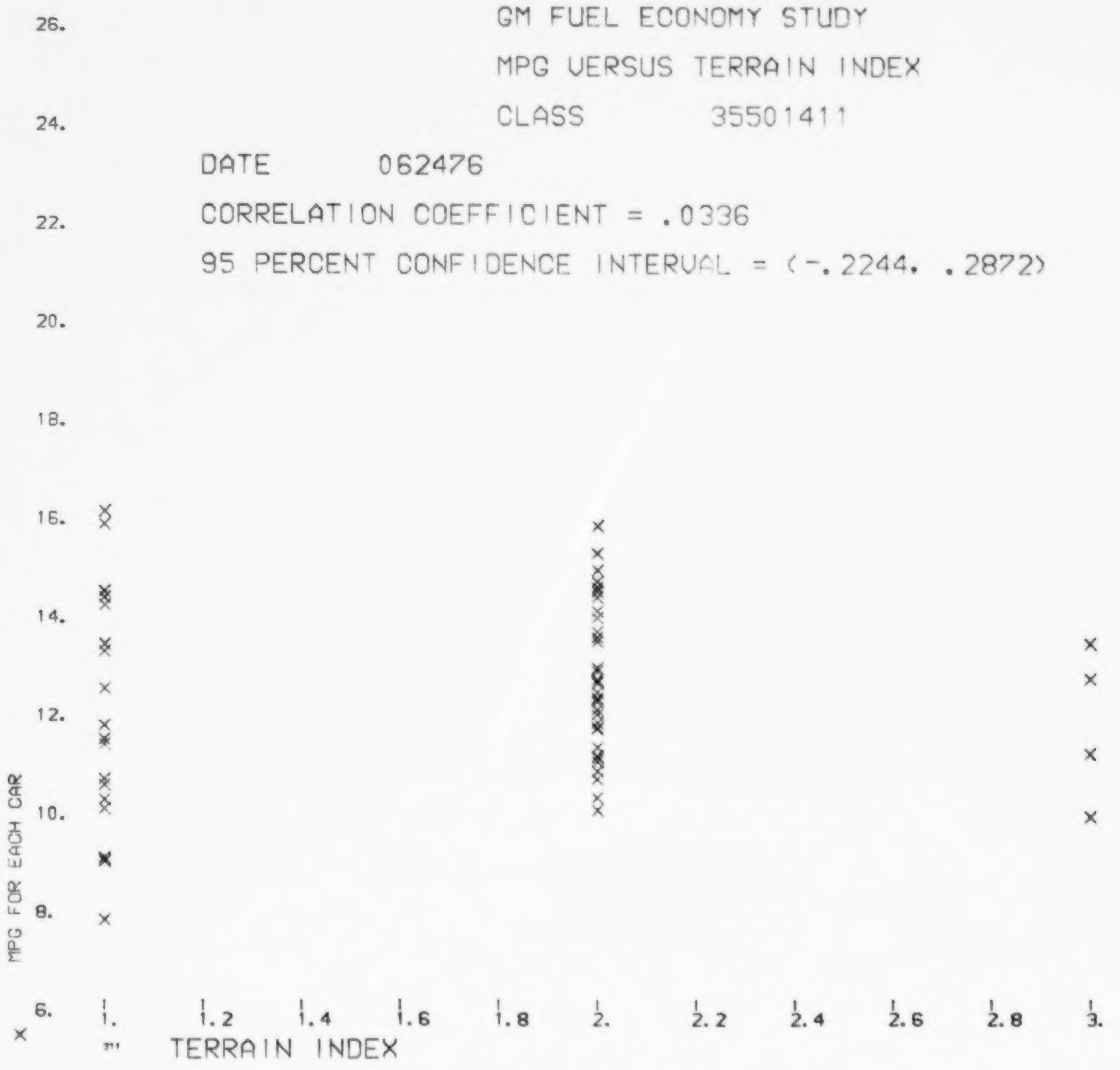
CORRELATION COEFFICIENT =-.3060

95 PERCENT CONFIDENCE INTERVAL = (-.5213,-.0542)



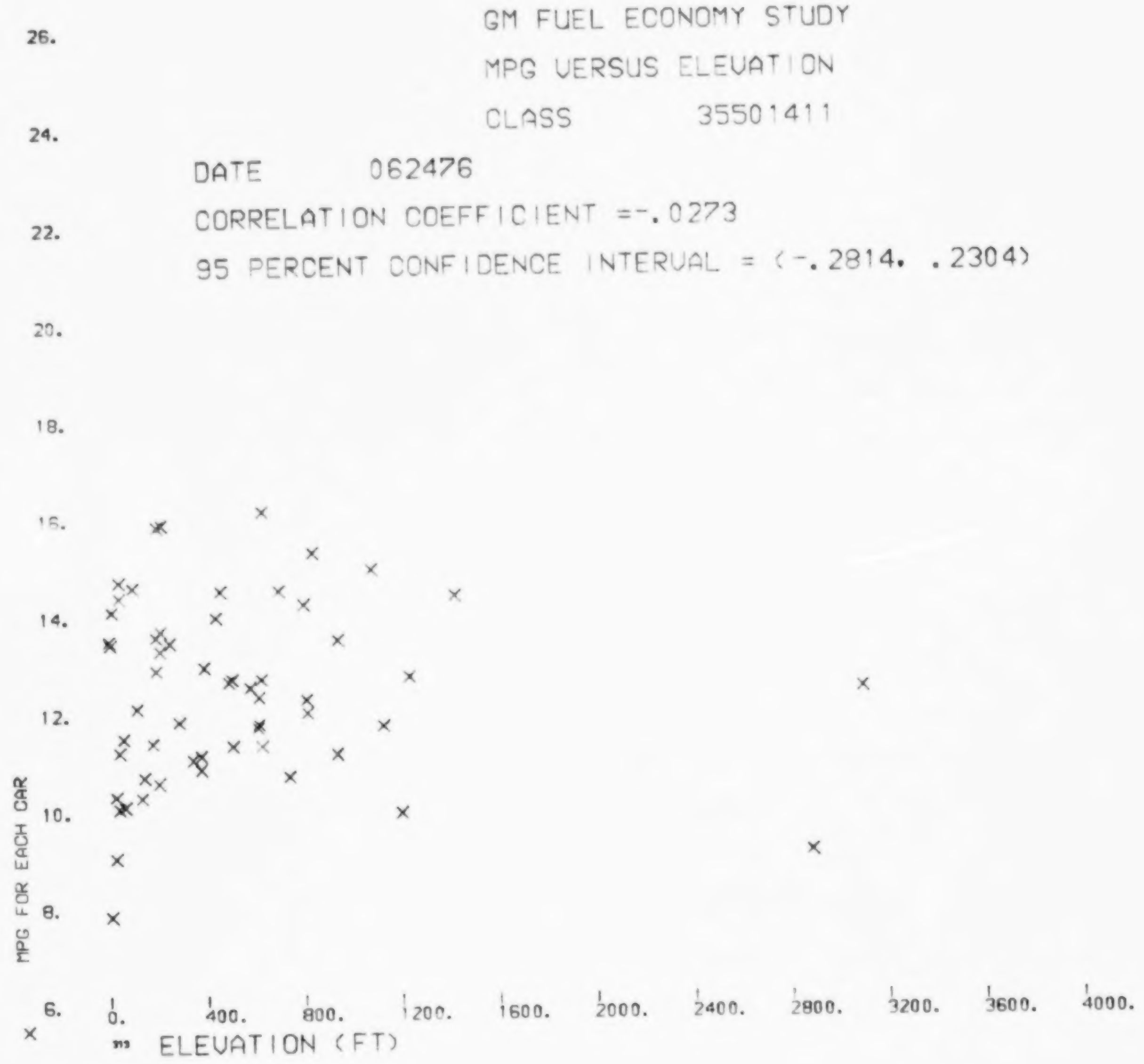
GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 35501411

DATE 062476
CORRELATION COEFFICIENT = .1810
95 PERCENT CONFIDENCE INTERVAL = (-.0788. .4177)



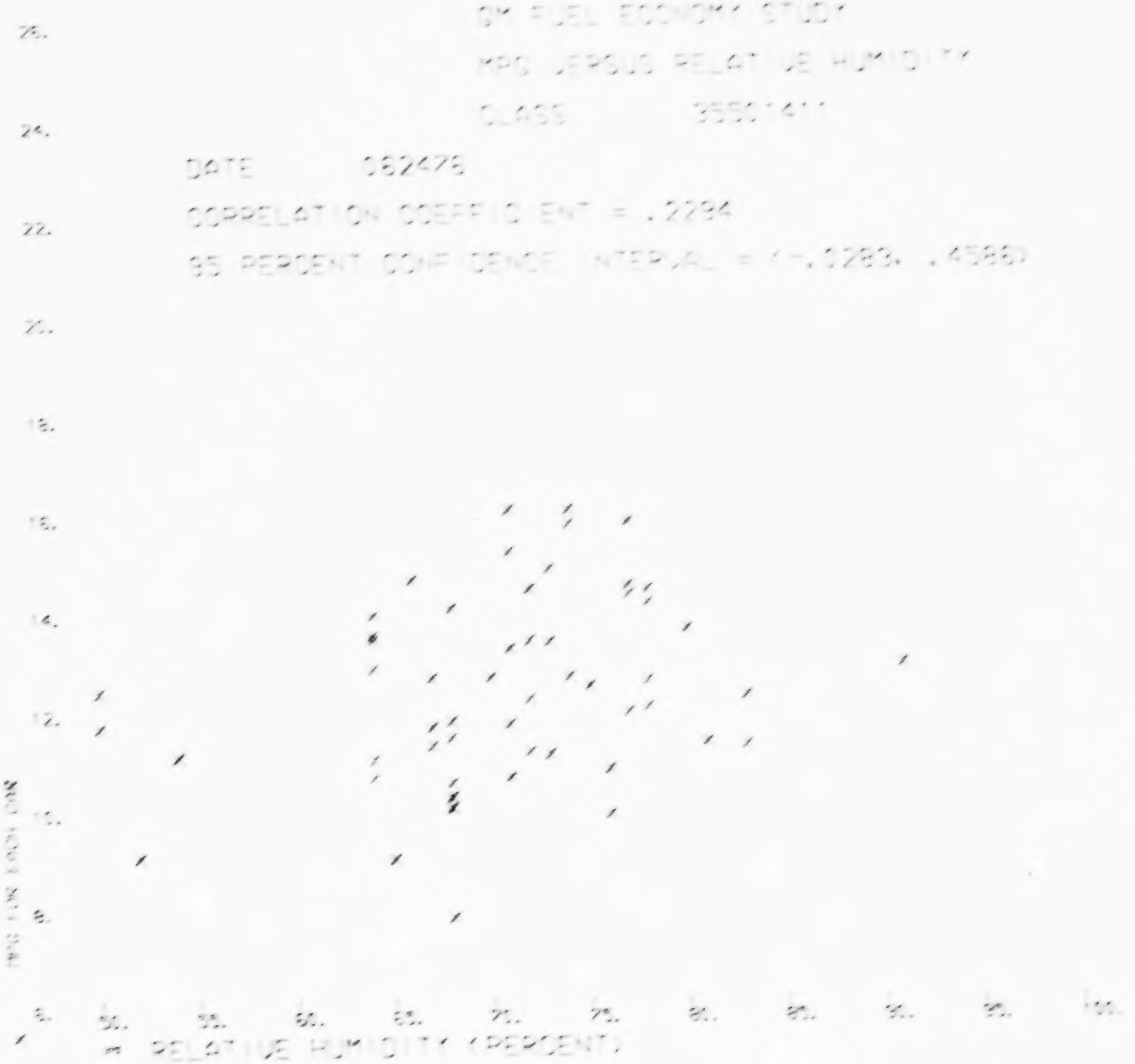
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 35501411

DATE 062476
CORRELATION COEFFICIENT = .0336
95 PERCENT CONFIDENCE INTERVAL = (-.2244. .2872)



GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 35501411

DATE 062476
CORRELATION COEFFICIENT =-.0273
95 PERCENT CONFIDENCE INTERVAL = (-.2814. .2304)



GM FUEL ECONOMY STUDY

MPG VERSUS RELATIVE HUMIDITY

CLASS 35501411

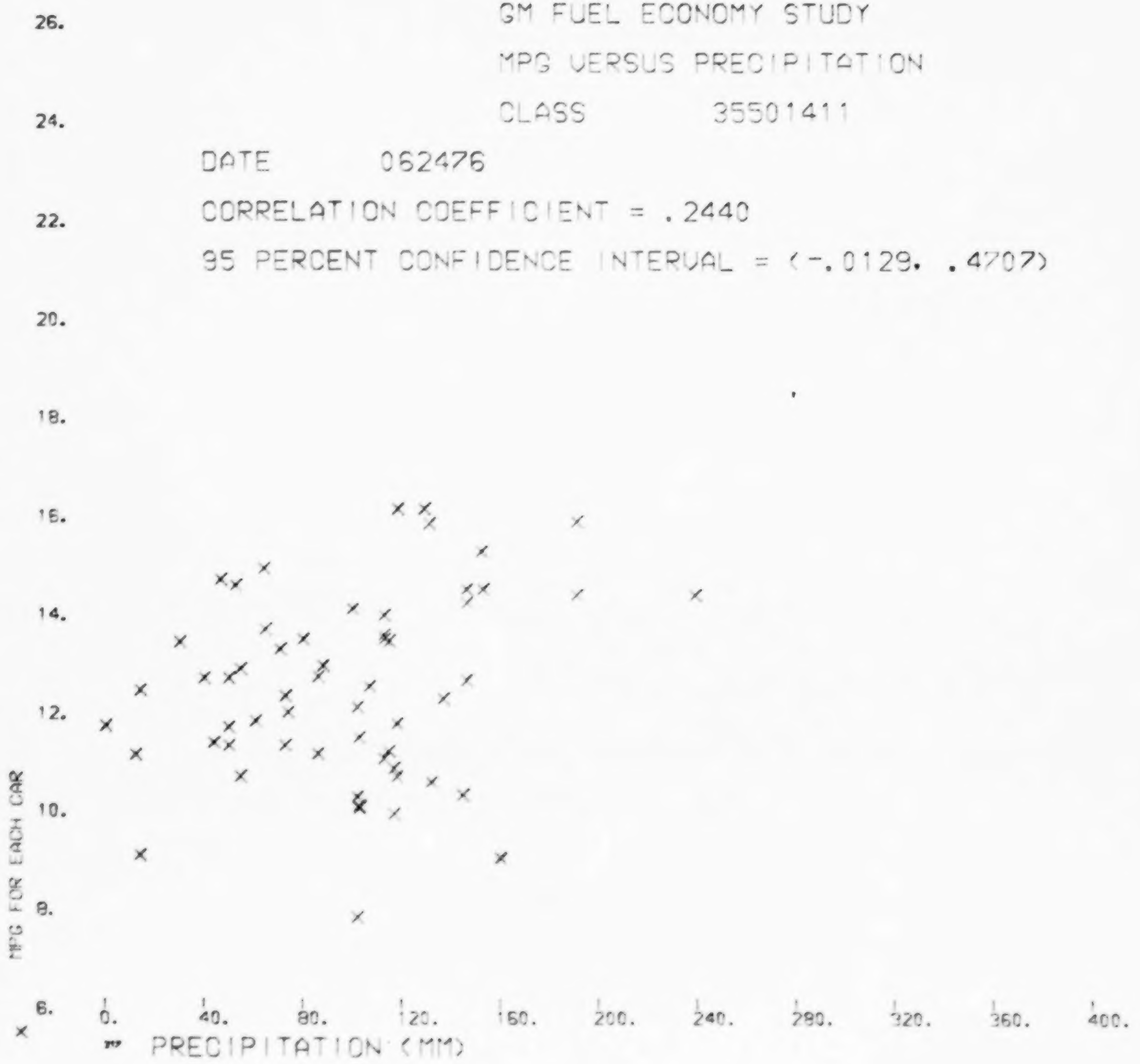
DATE 062476

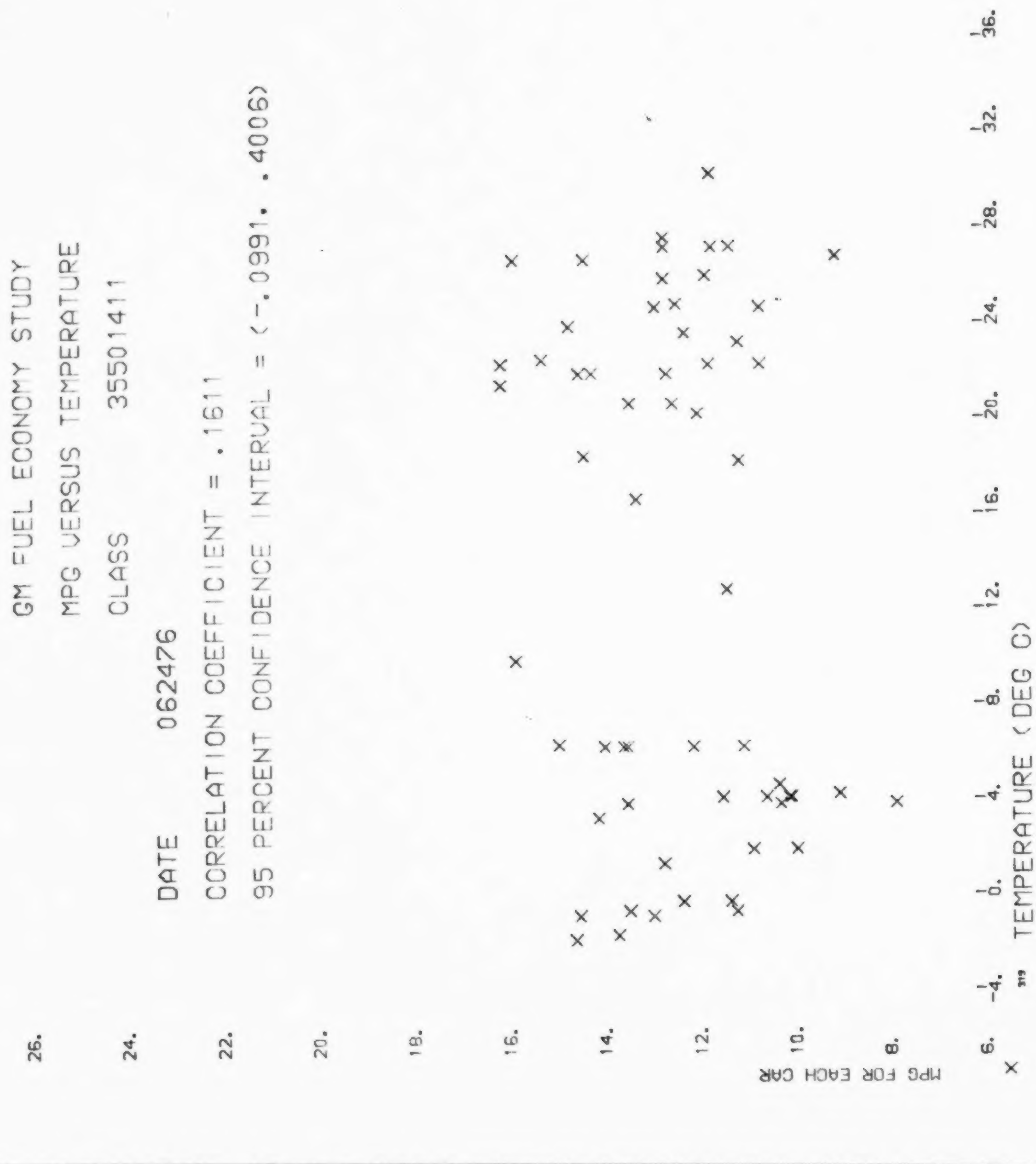
CORRELATION COEFFICIENT = .2294

95 PERCENT CONFIDENCE INTERVAL = (-.0283, .4586)

GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 35501411

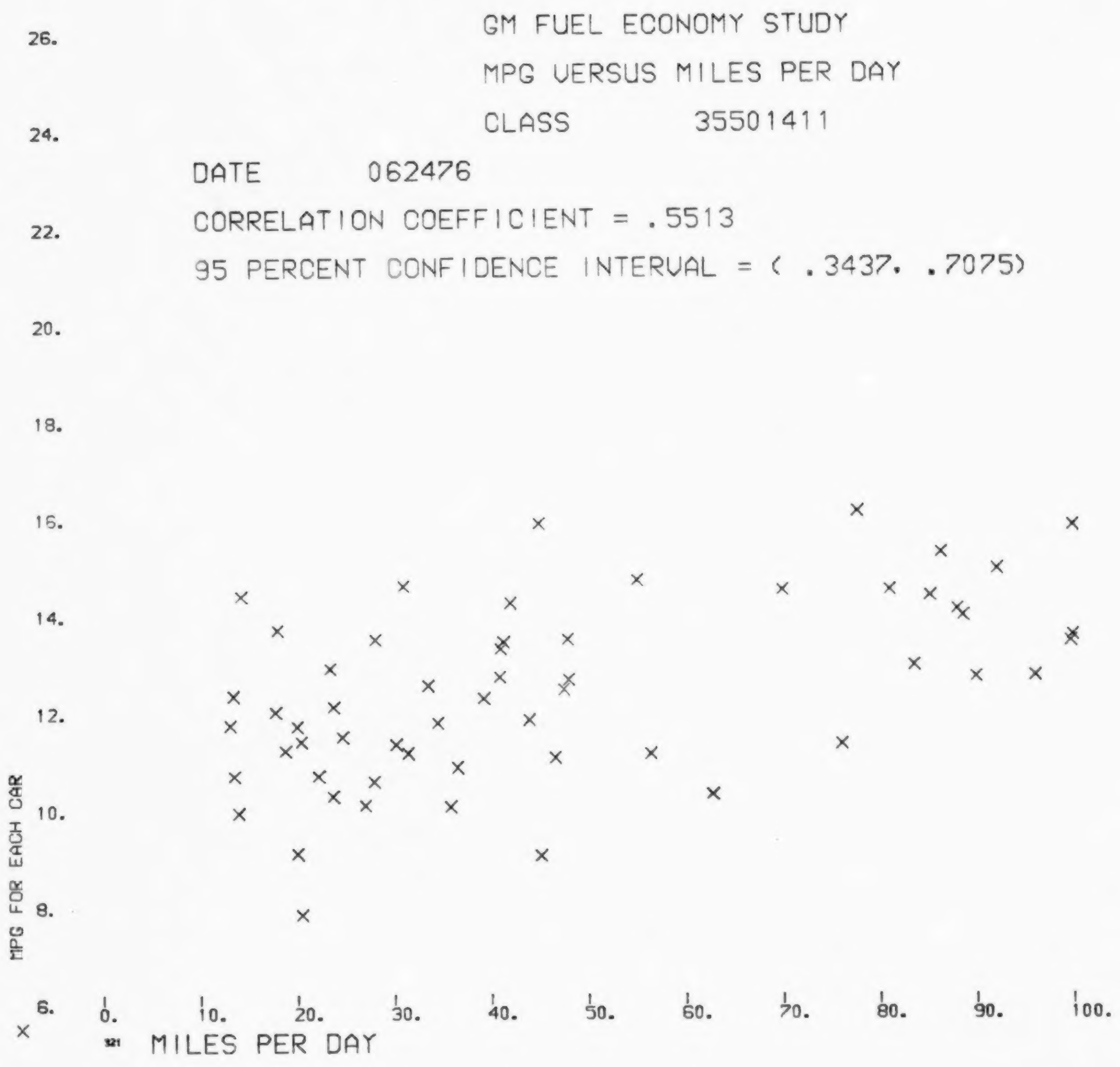
DATE 062476
CORRELATION COEFFICIENT = .2440
95 PERCENT CONFIDENCE INTERVAL = (-.0129. .4707)





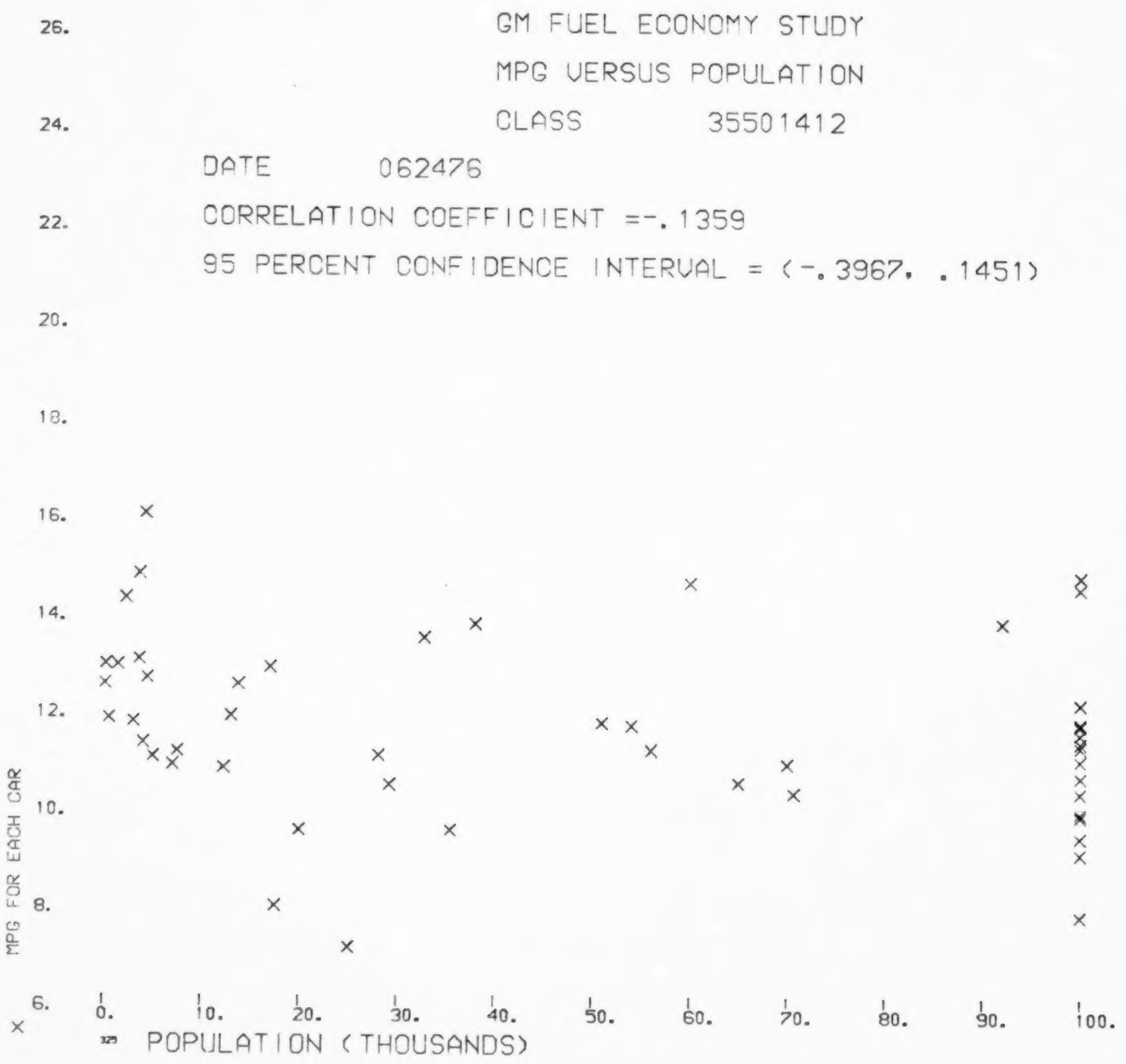
GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 35501411

DATE 062476
CORRELATION COEFFICIENT = .1611
95 PERCENT CONFIDENCE INTERVAL = (-.0991. .4006)



GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 35501411

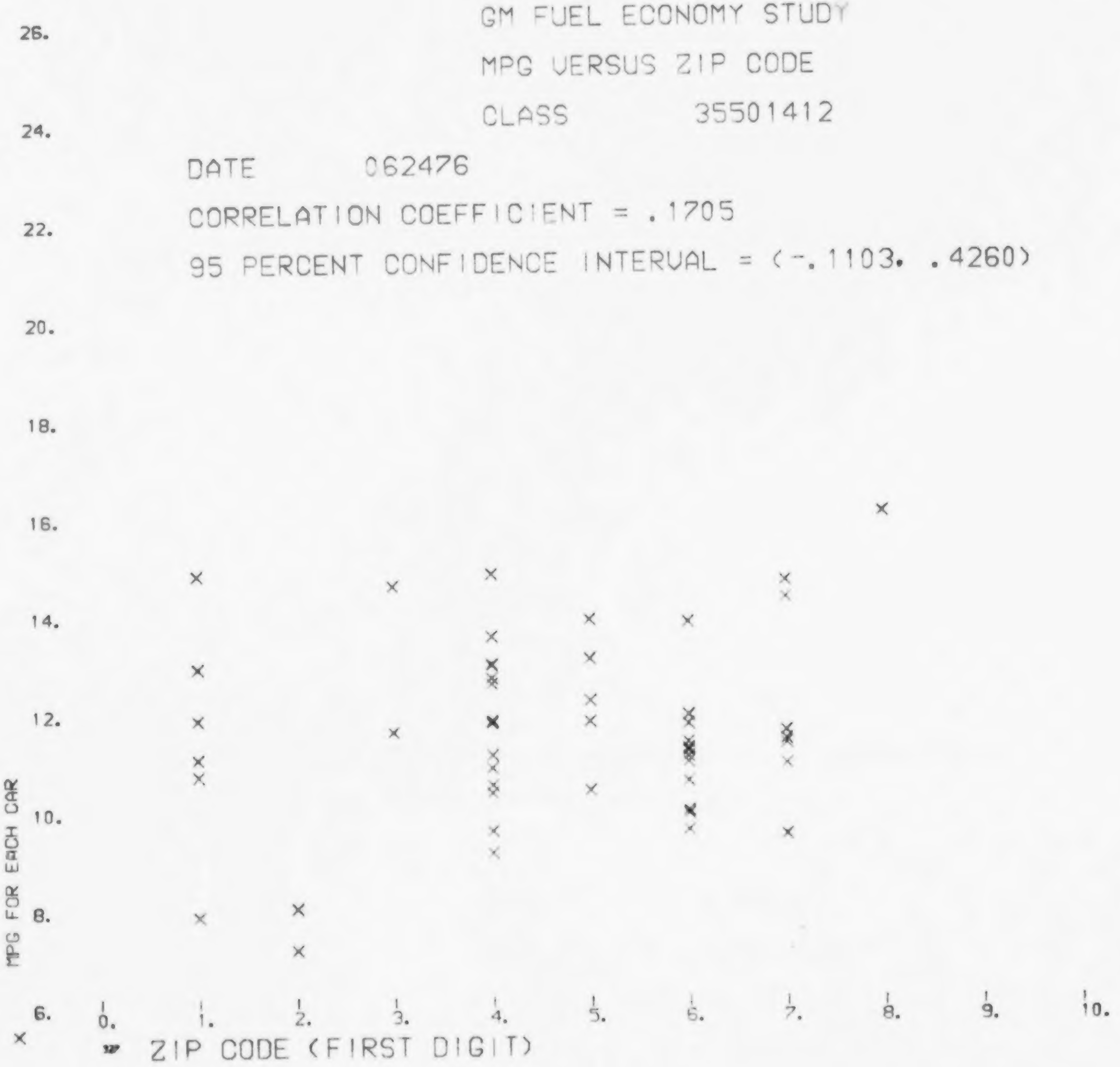
DATE 062476
CORRELATION COEFFICIENT = .5513
95 PERCENT CONFIDENCE INTERVAL = (.3437. .7075)

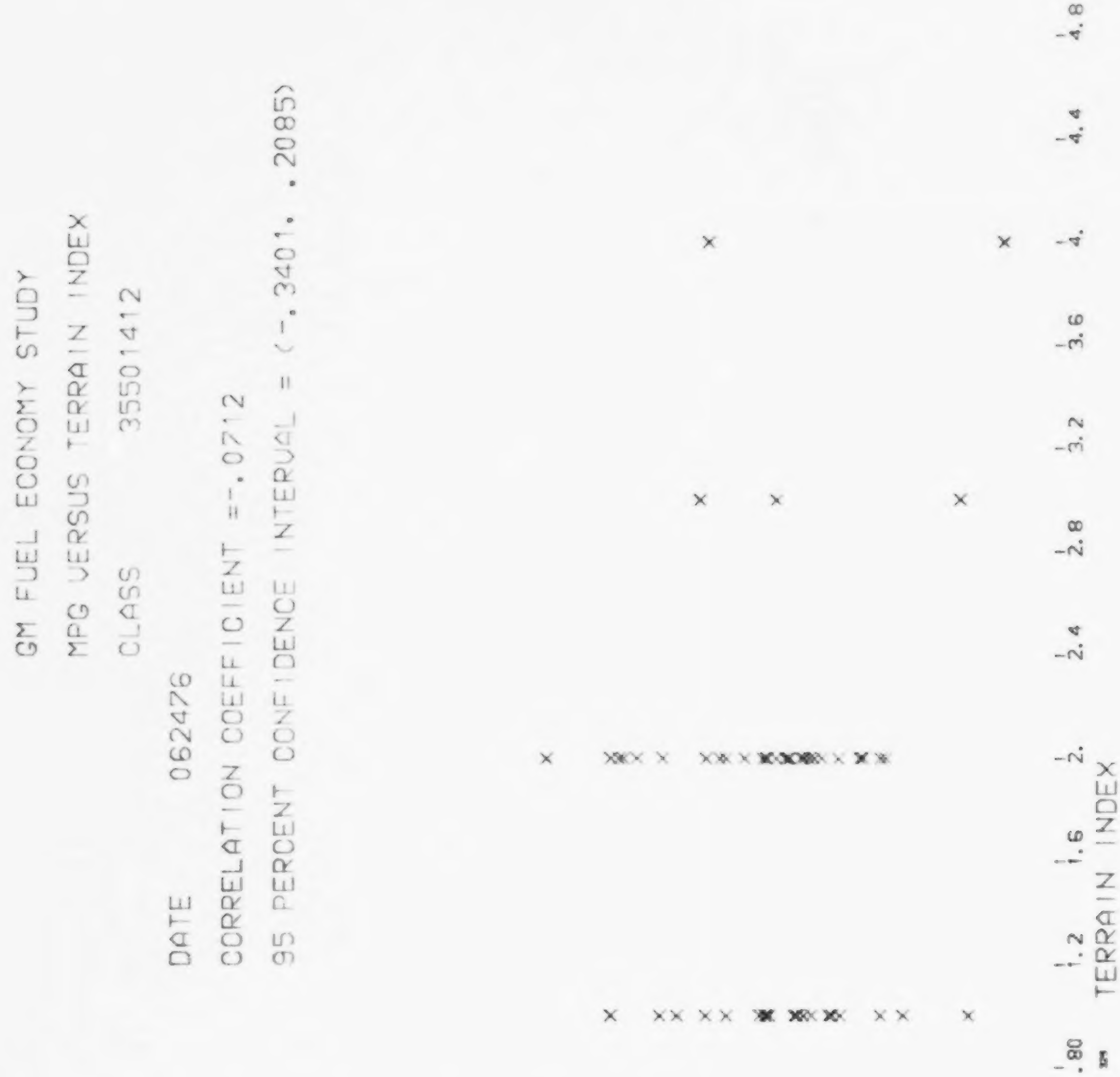


GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 35501412
DATE 062476
CORRELATION COEFFICIENT =-.1359
95 PERCENT CONFIDENCE INTERVAL = (-.3967, .1451)

GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 35501412

DATE 062476
CORRELATION COEFFICIENT = .1705
95 PERCENT CONFIDENCE INTERVAL = (-.1103. .4260)





GM FUEL ECONOMY STUDY

MPG VERSUS TERRAIN INDEX

CLASS 35501412

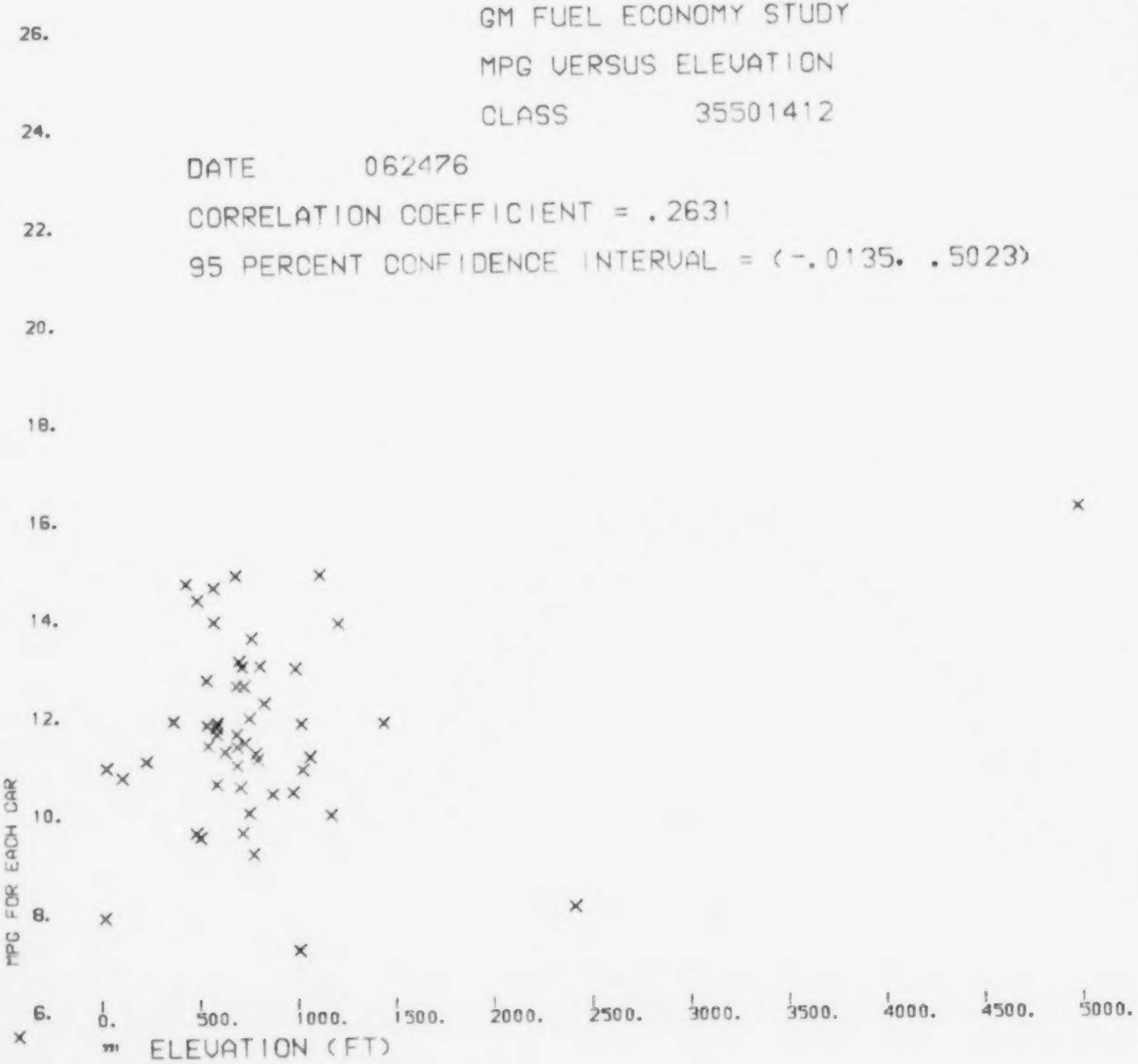
DATE 062476

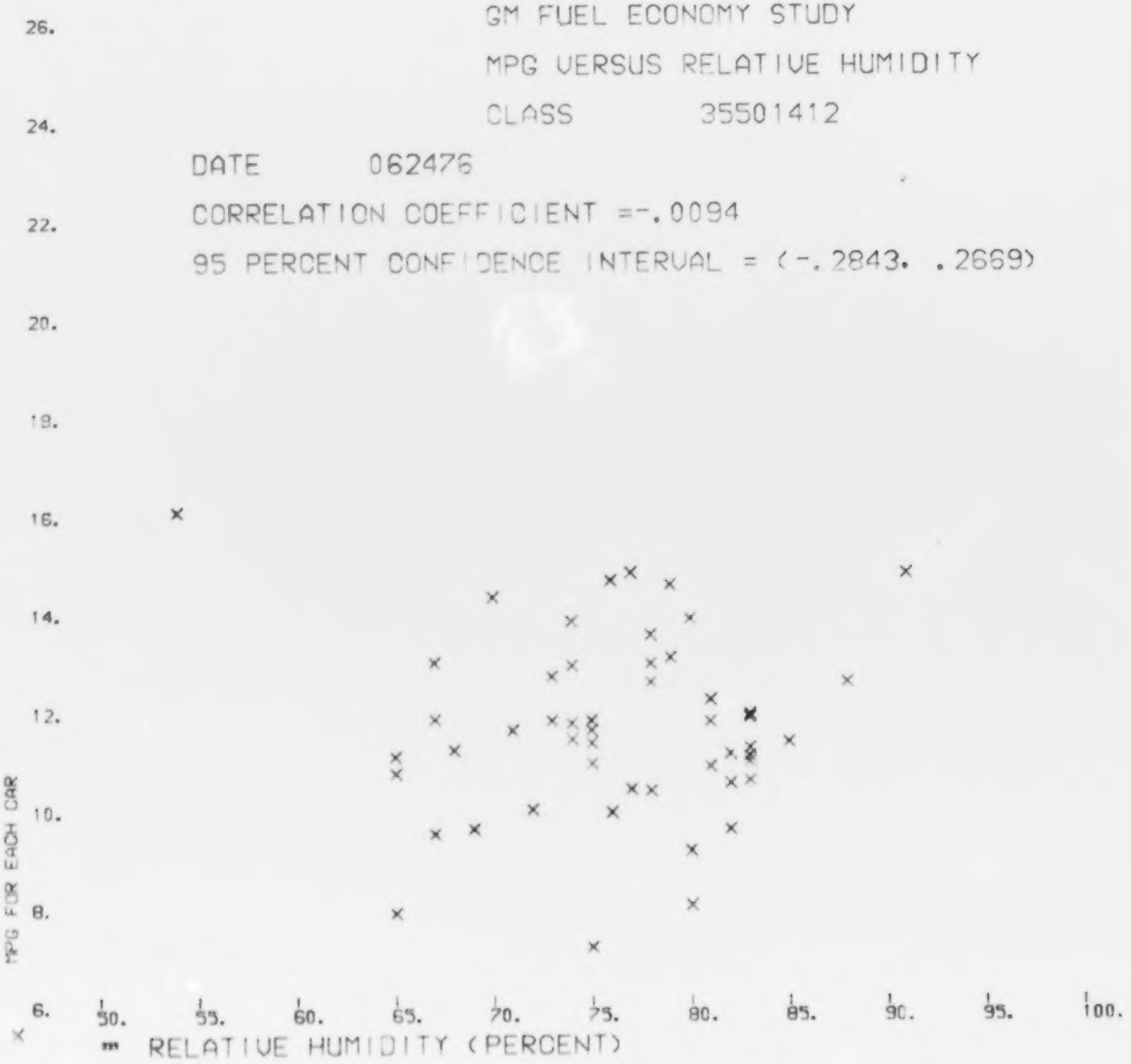
CORRELATION COEFFICIENT =-.0712

95 PERCENT CONFIDENCE INTERVAL = (-.3401, .2085)

GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 35501412

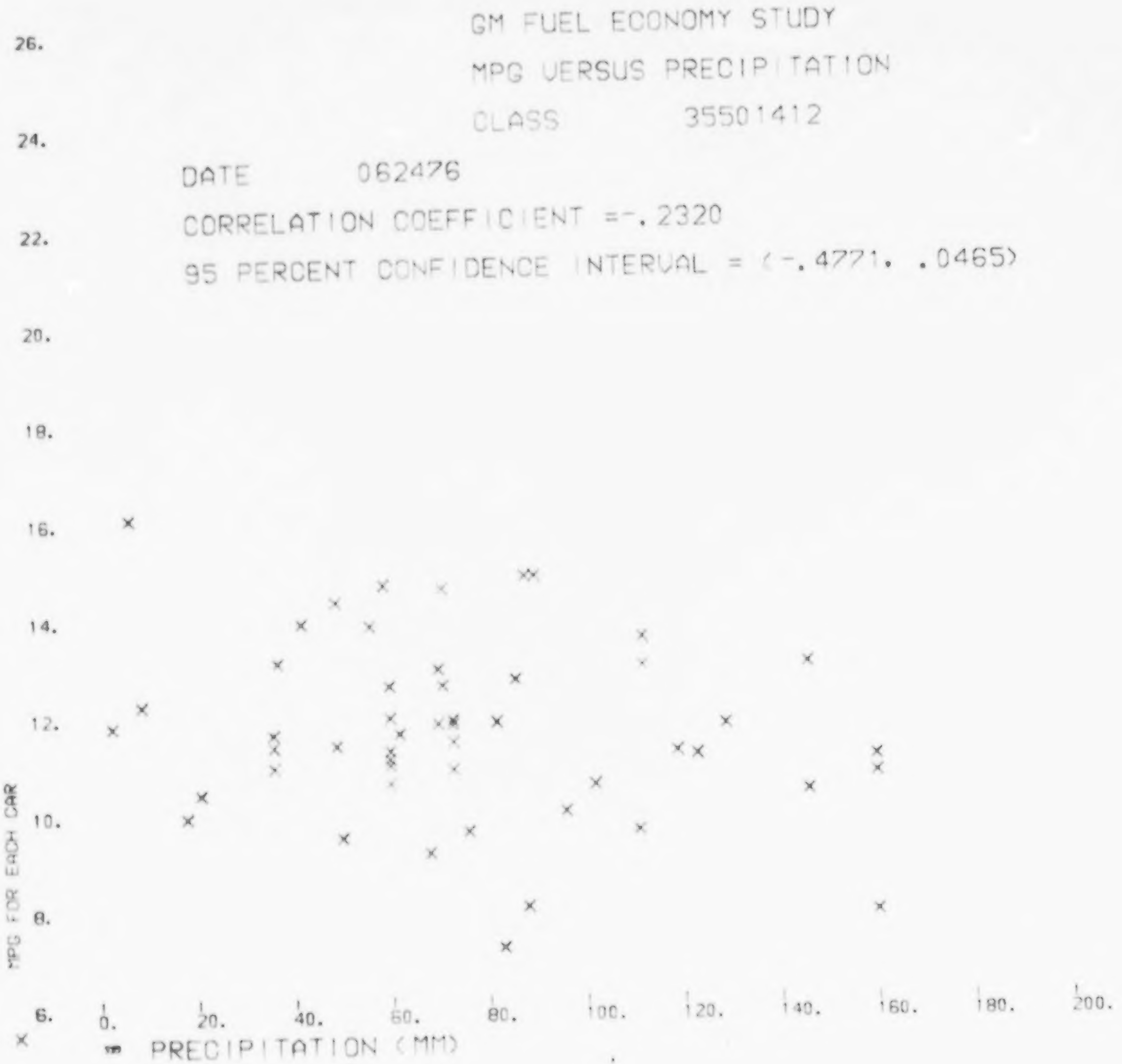
DATE 062476
CORRELATION COEFFICIENT = .2631
95 PERCENT CONFIDENCE INTERVAL = (-.0135. .5023)





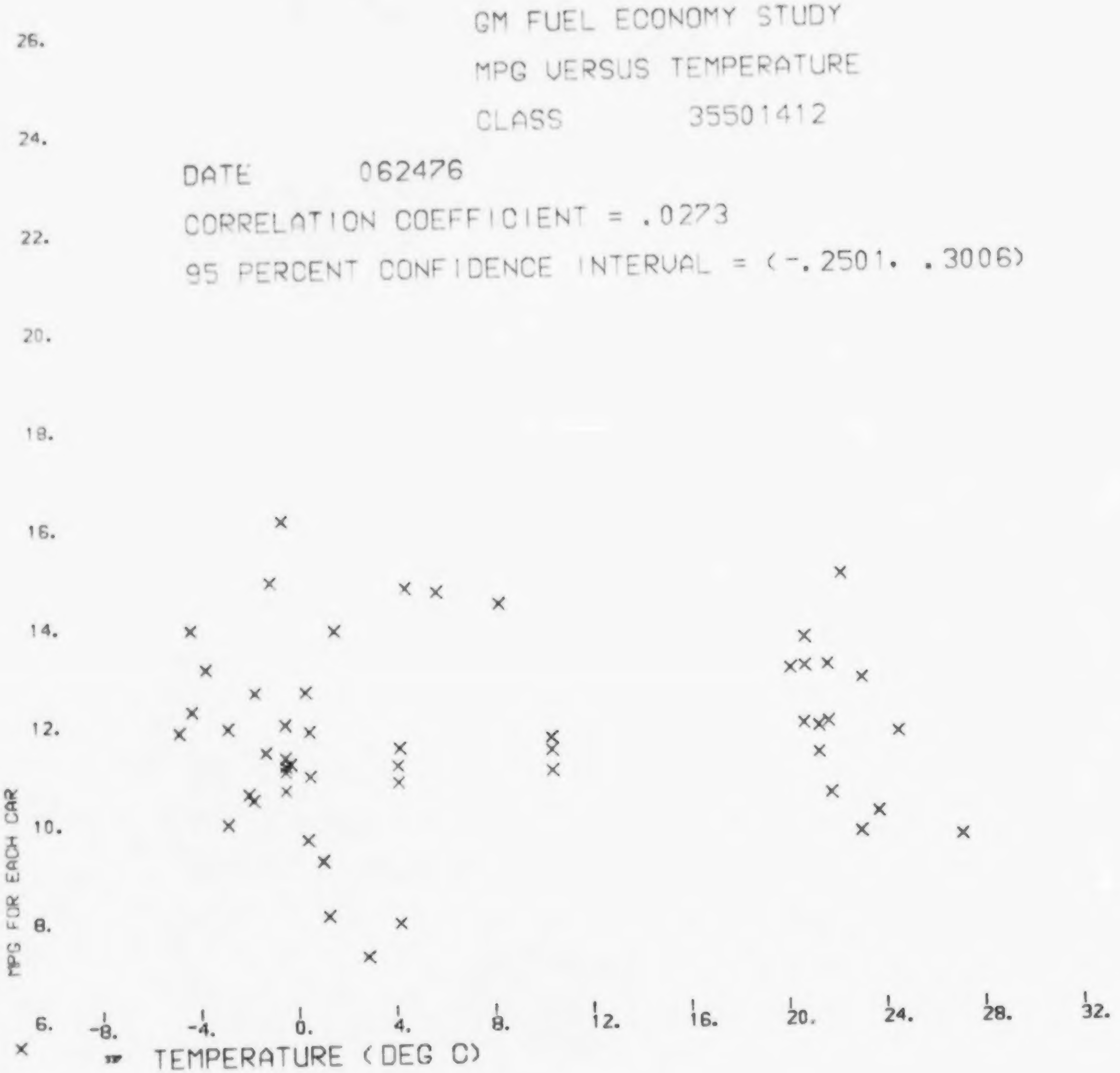
GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 35501412

DATE 062476
CORRELATION COEFFICIENT =-.0094
95 PERCENT CONFIDENCE INTERVAL = (-.2843, .2669)



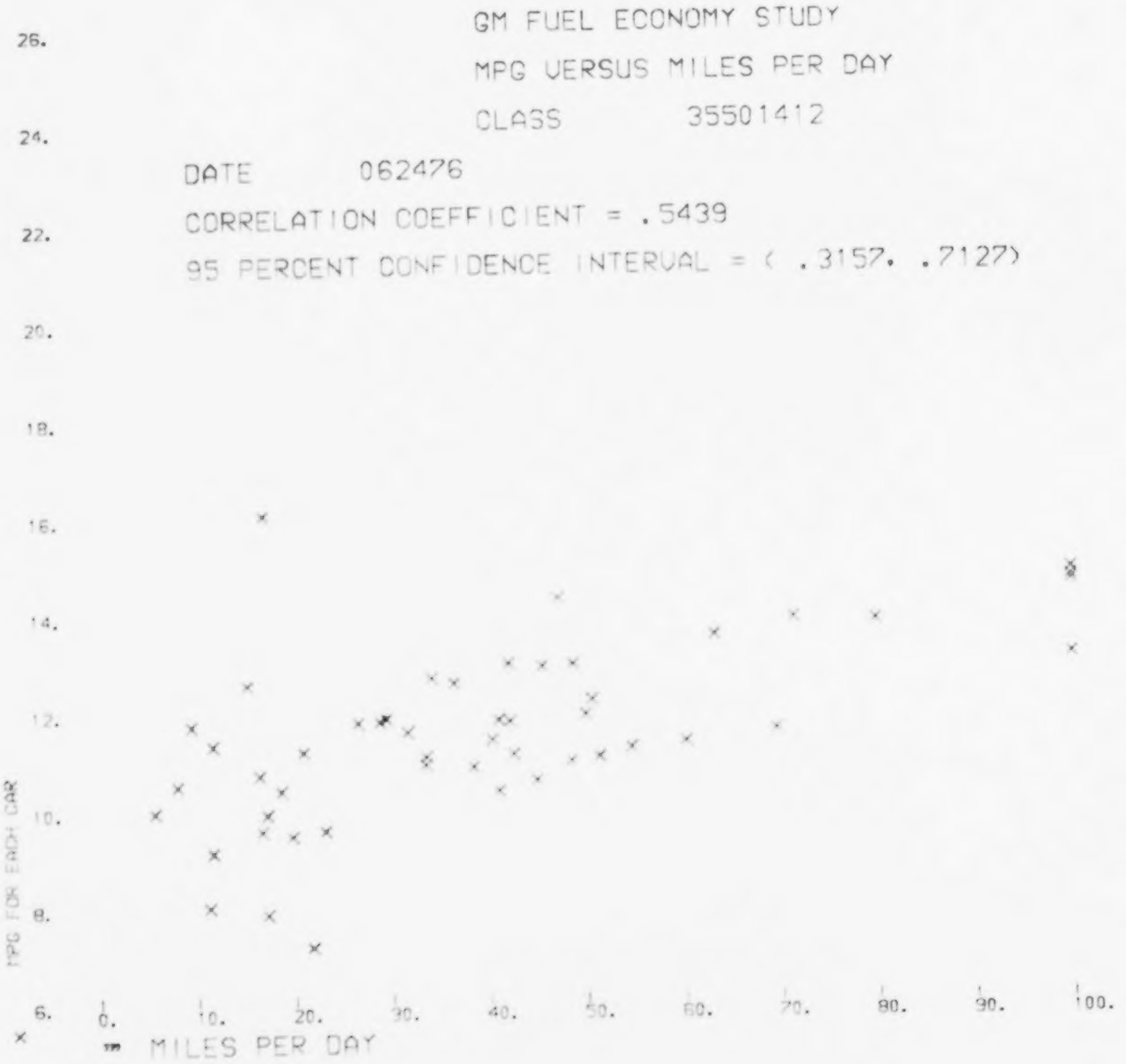
GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 35501412

DATE 062476
CORRELATION COEFFICIENT =-.2320
95 PERCENT CONFIDENCE INTERVAL = (-.4771, .0465)



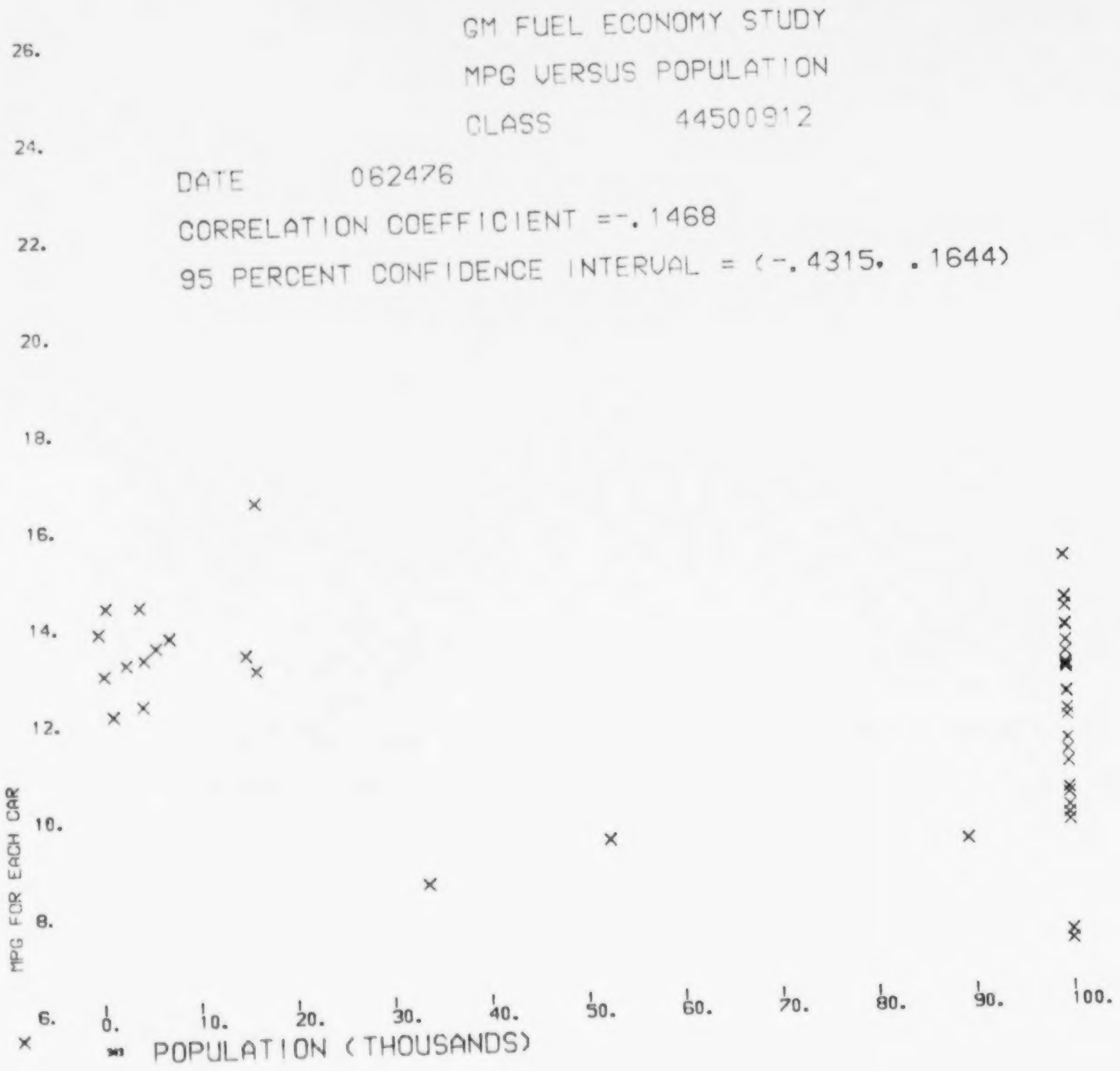
GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 35501412

DATE 062476
CORRELATION COEFFICIENT = .0273
95 PERCENT CONFIDENCE INTERVAL = (-.2501. .3006)



GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 35501412

DATE 062476
CORRELATION COEFFICIENT = .5439
95 PERCENT CONFIDENCE INTERVAL = (.3157. .7127)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 44500912

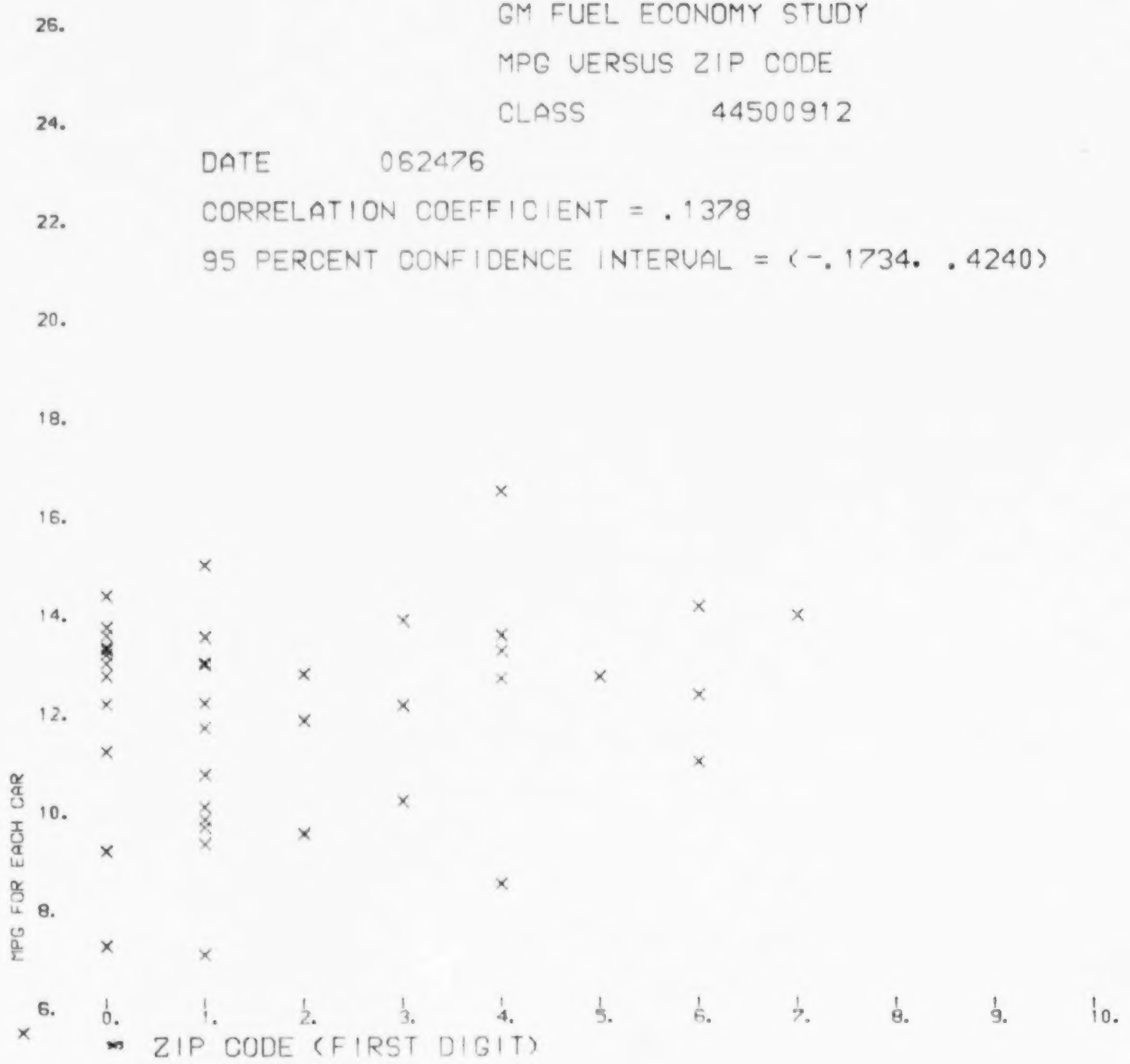
DATE 062476
CORRELATION COEFFICIENT =-.1468
95 PERCENT CONFIDENCE INTERVAL = (-.4315, .1644)

GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 44500912

DATE 062476

CORRELATION COEFFICIENT = .1378

95 PERCENT CONFIDENCE INTERVAL = (-.1734. .4240)



GM FUEL ECONOMY STUDY

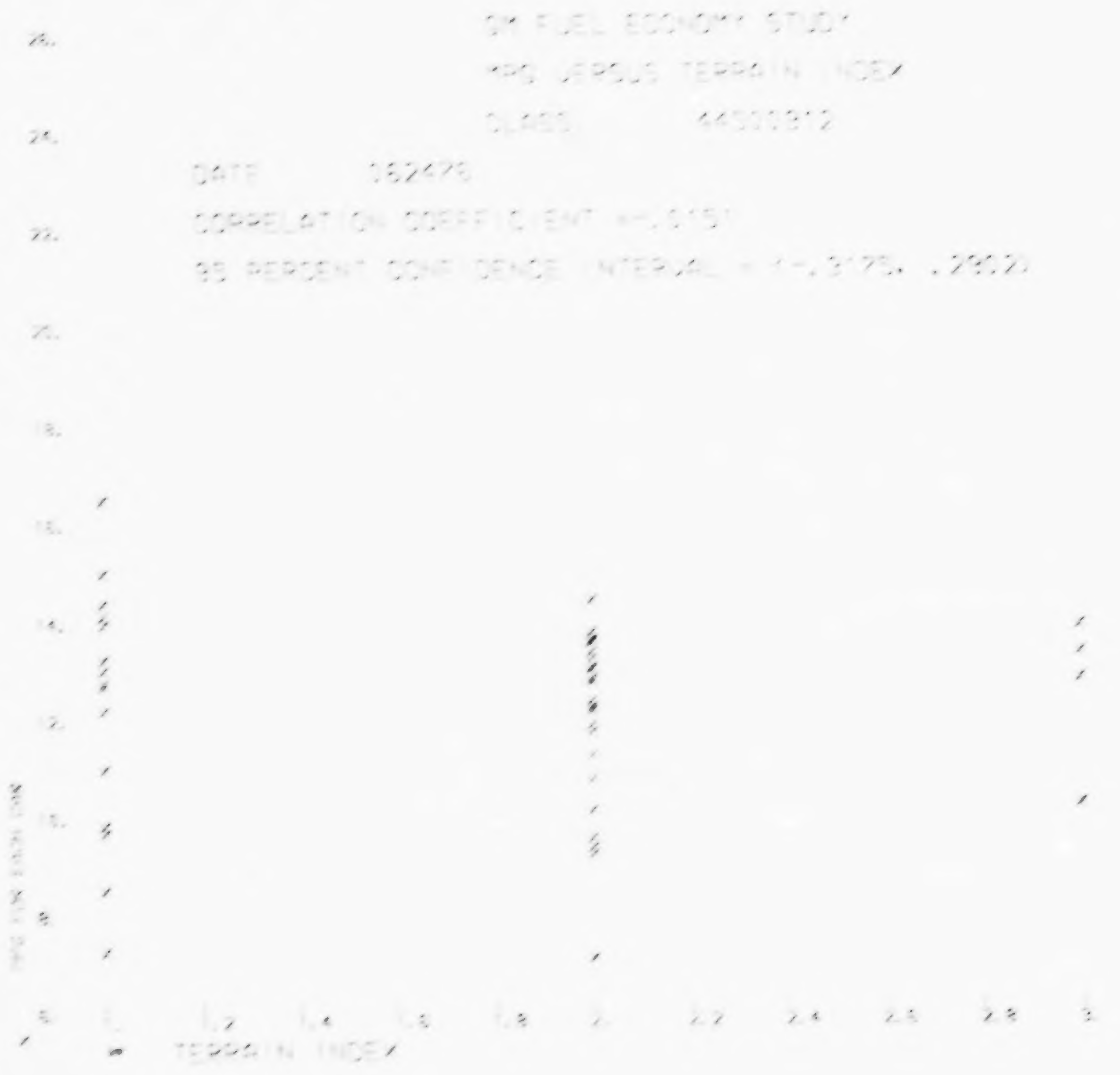
MPG VERSUS TERRAIN INDEX

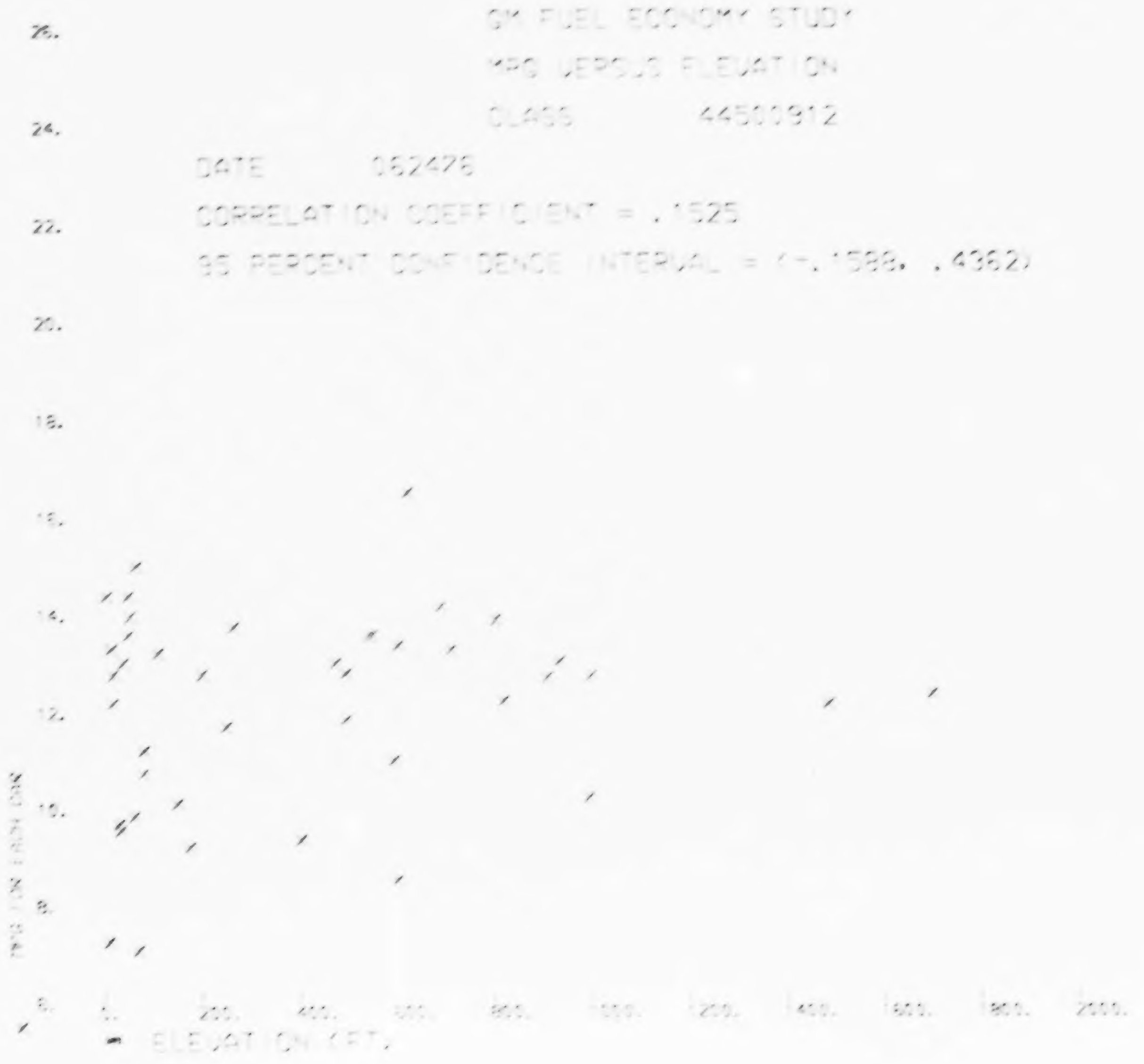
CLASS 44S00312

DATE 062476

CORRELATION COEFFICIENT =-.0151

95 PERCENT CONFIDENCE INTERVAL = (-.3175, .2902)





GM FUEL ECONOMY STUDY

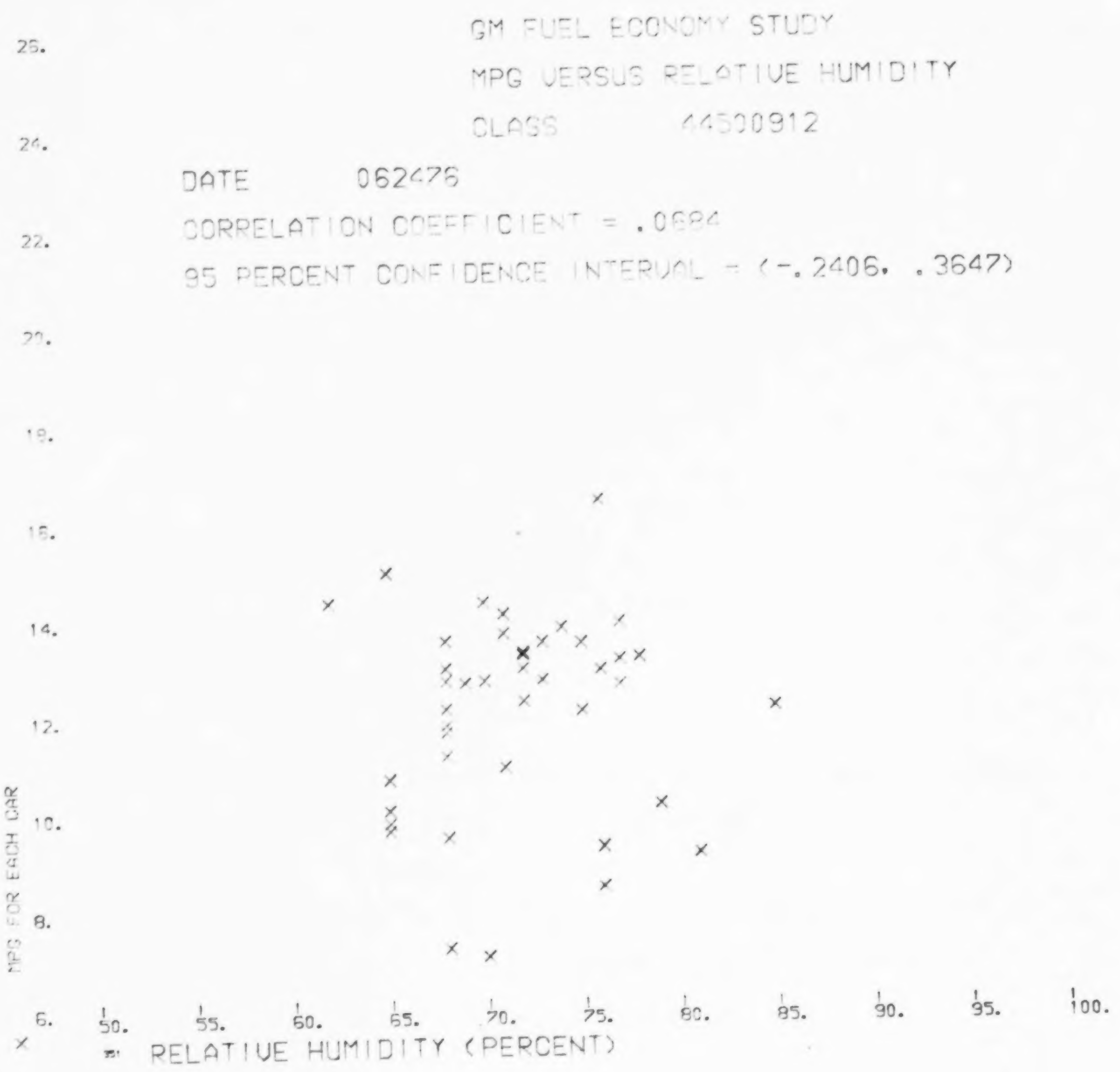
MPG VERSUS ELEVATION

CLASS 44500912

DATE 062476

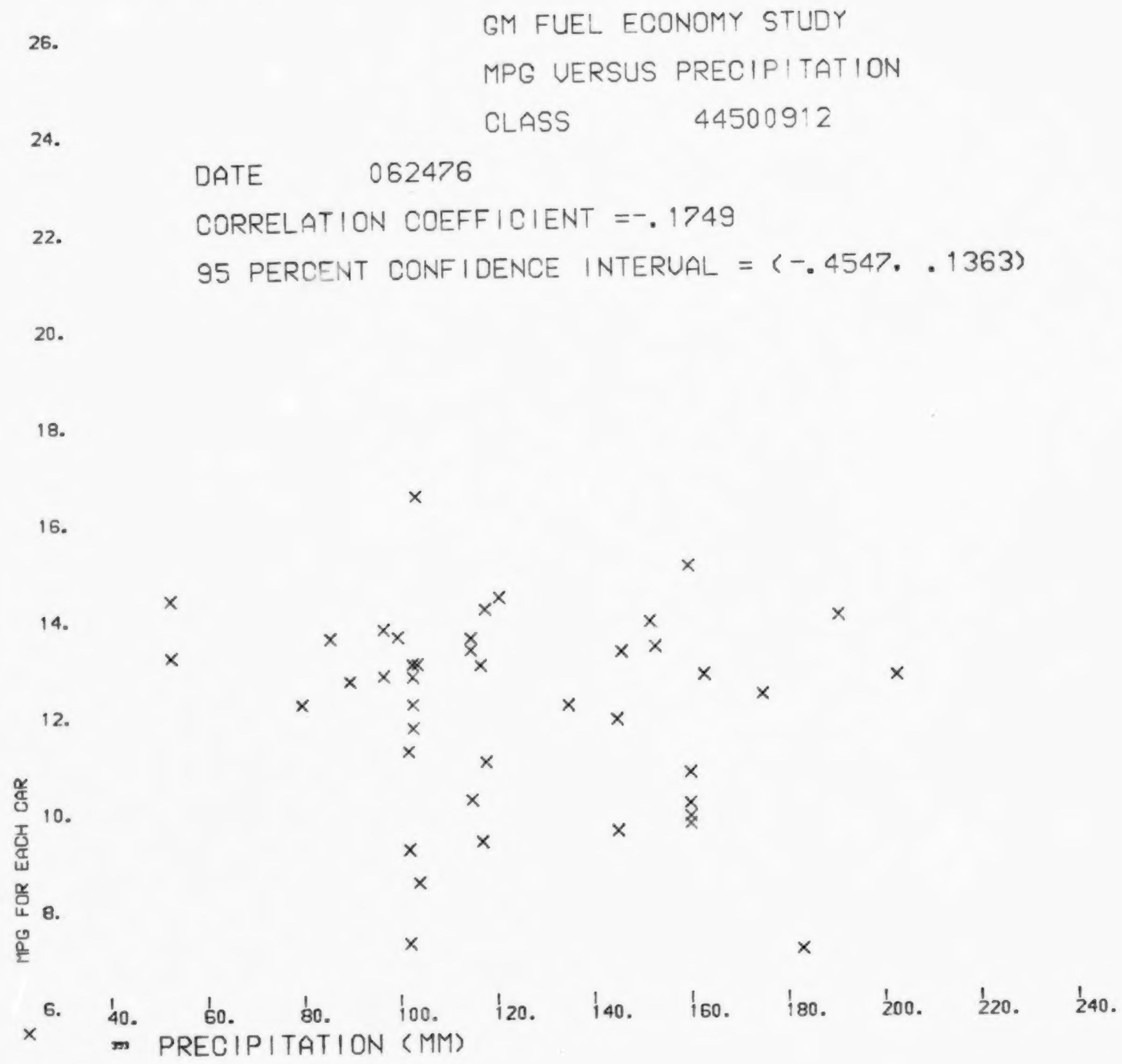
CORRELATION COEFFICIENT = .1525

95 PERCENT CONFIDENCE INTERVAL = (-.1588, .4362)



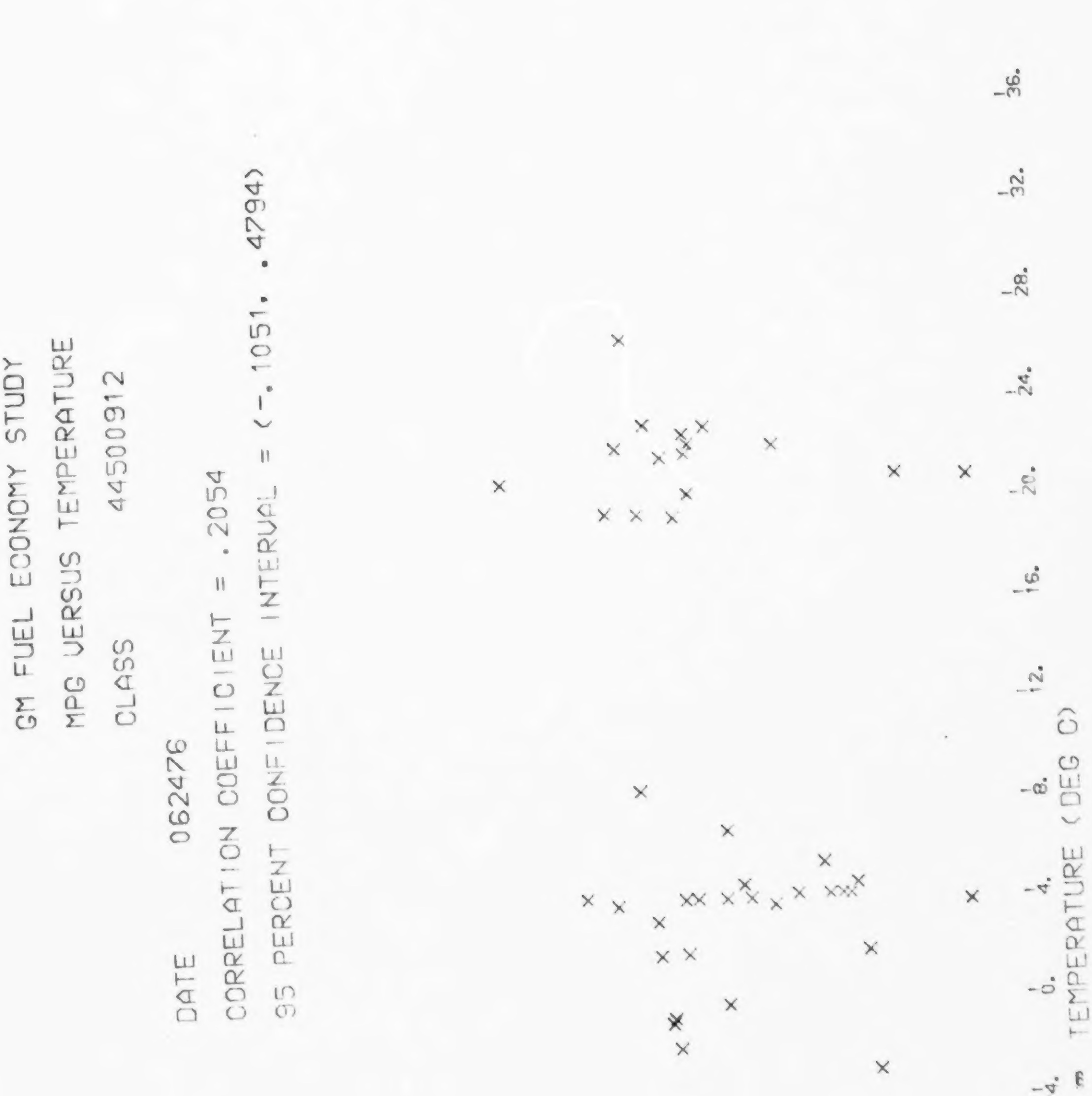
GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 44500912

DATE 062476
CORRELATION COEFFICIENT = .0684
95 PERCENT CONFIDENCE INTERVAL = (-.2406, .3647)



GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 44500912

DATE 062476
CORRELATION COEFFICIENT =-.1749
95 PERCENT CONFIDENCE INTERVAL = (-.4547, .1363)



GM FUEL ECONOMY STUDY

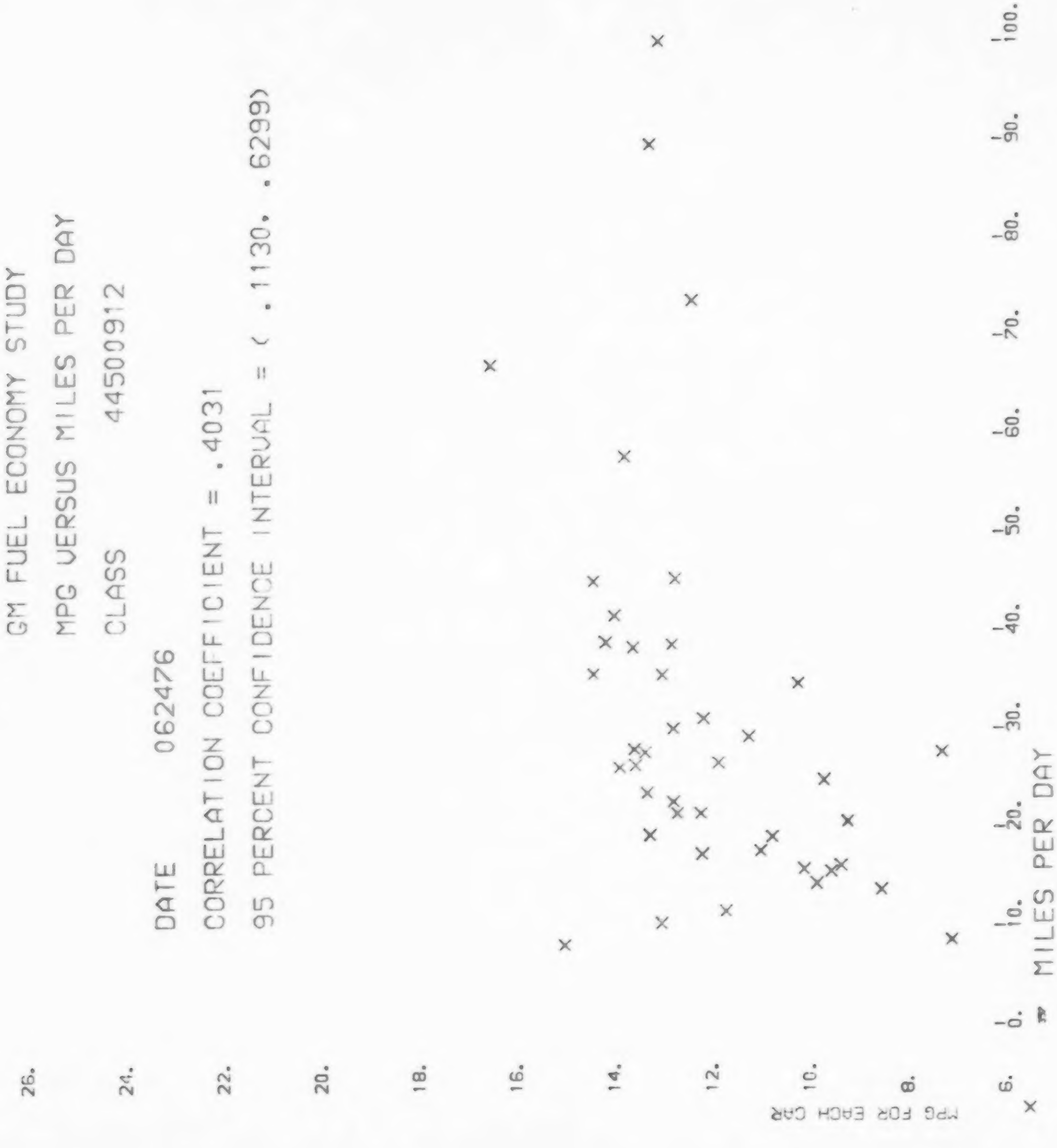
MPG VERSUS TEMPERATURE

CLASS 44500912

DATE 062476

CORRELATION COEFFICIENT = .2054

95 PERCENT CONFIDENCE INTERVAL = (-.1051, .4794)



GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 44500912

DATE 062476
CORRELATION COEFFICIENT = .4031
95 PERCENT CONFIDENCE INTERVAL = (.1130, .6299)

GM FUEL ECONOMY STUDY

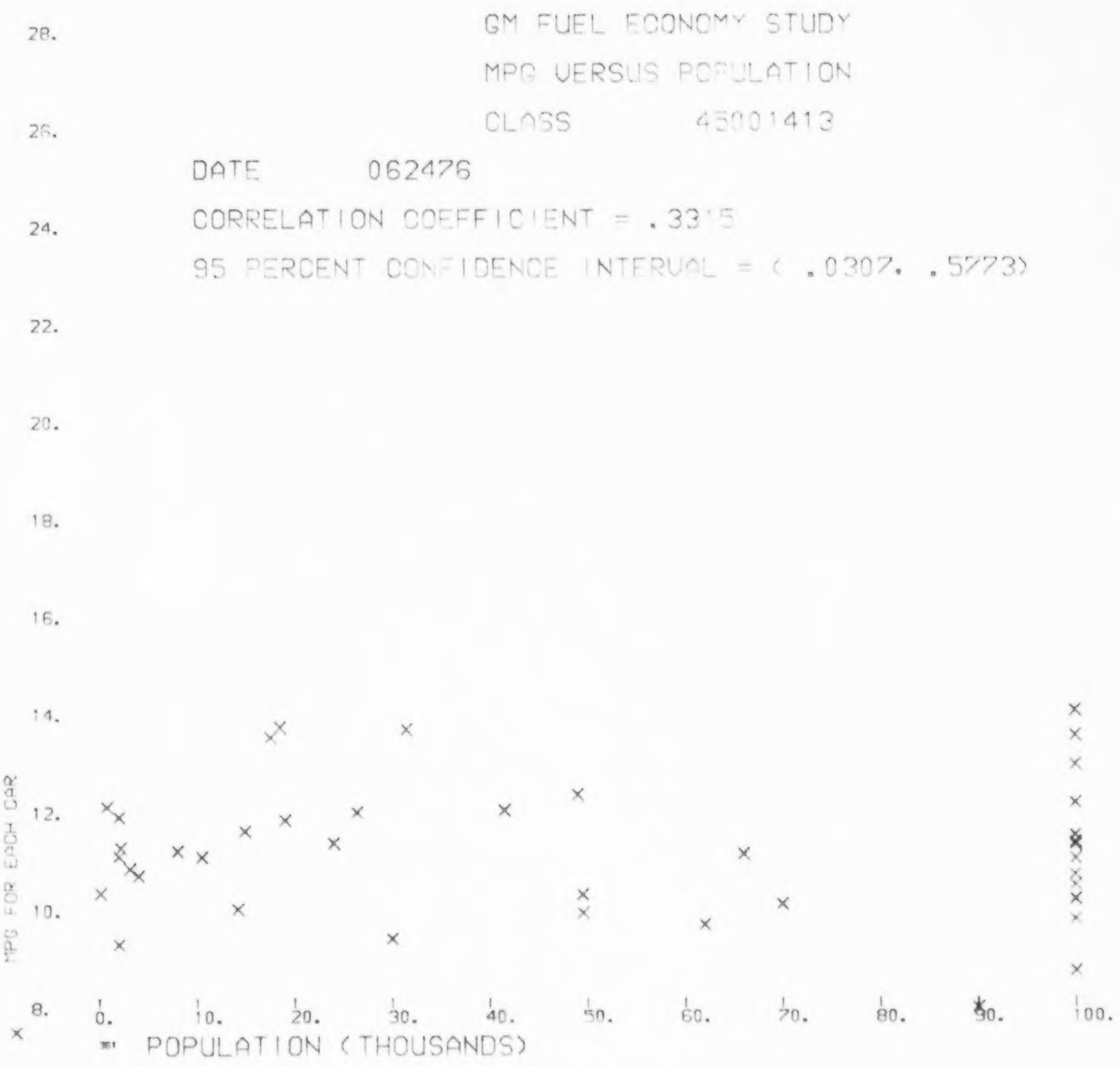
MPG VERSUS POPULATION

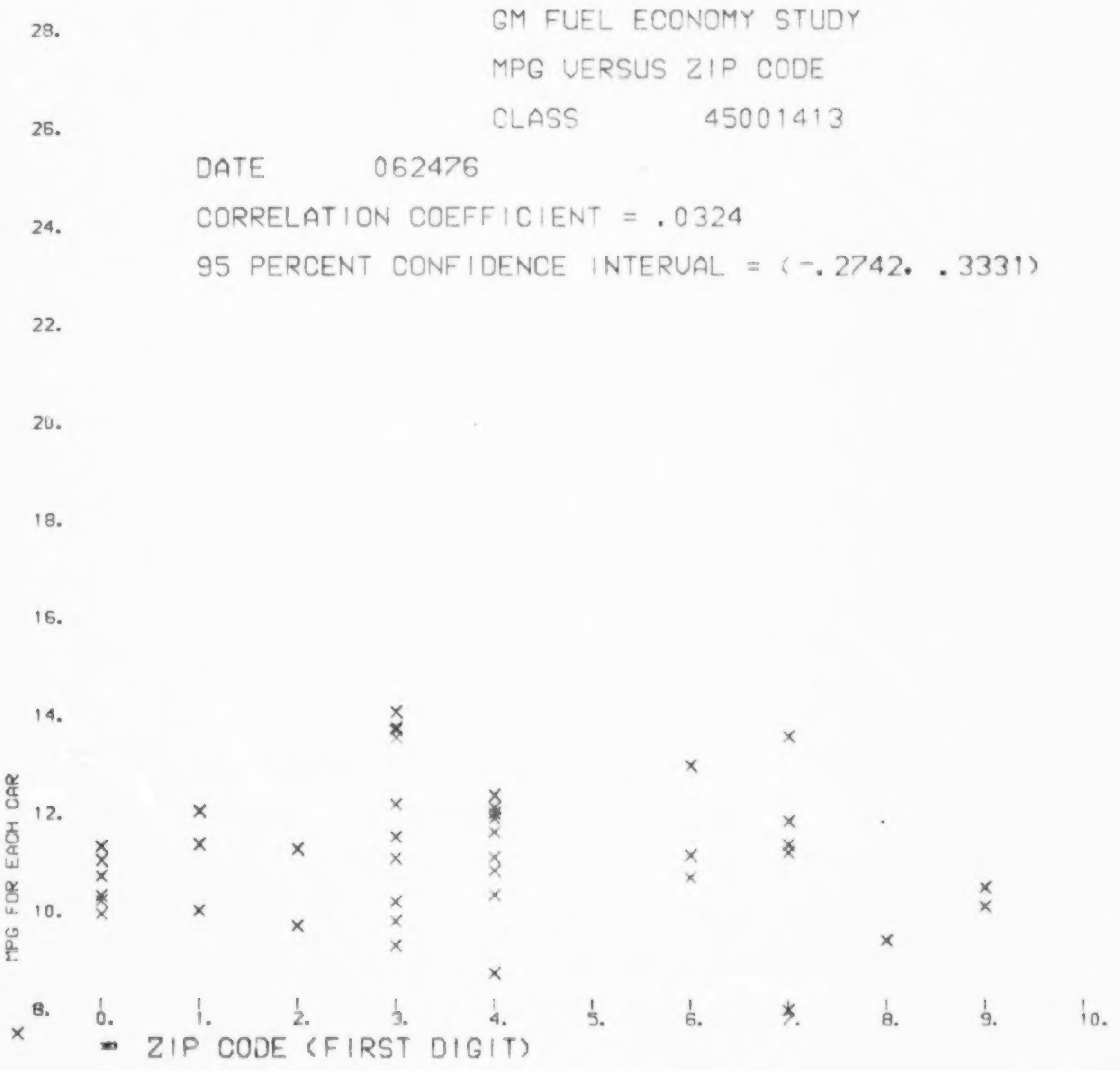
CLASS 45001413

DATE 062476

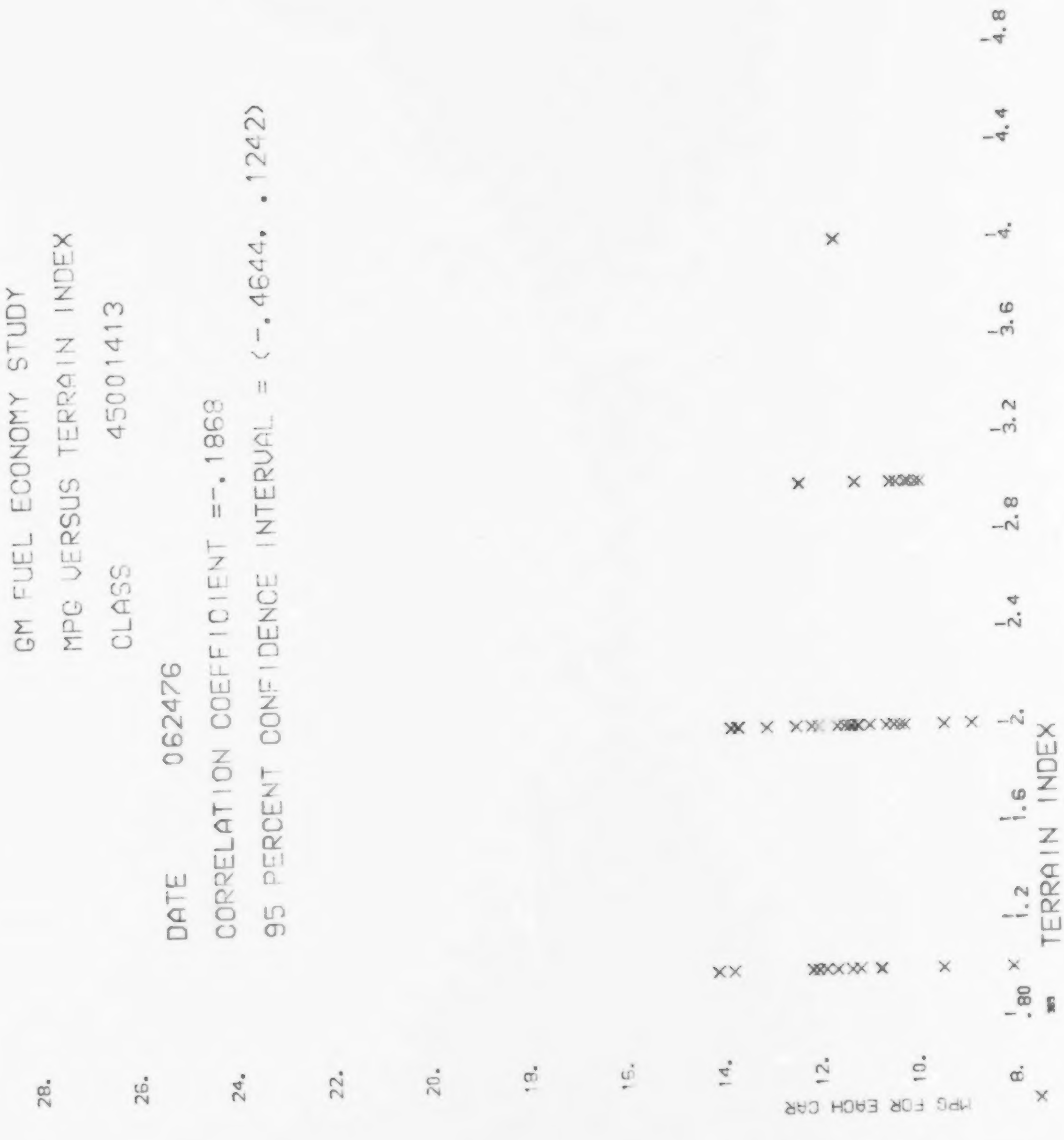
CORRELATION COEFFICIENT = .3315

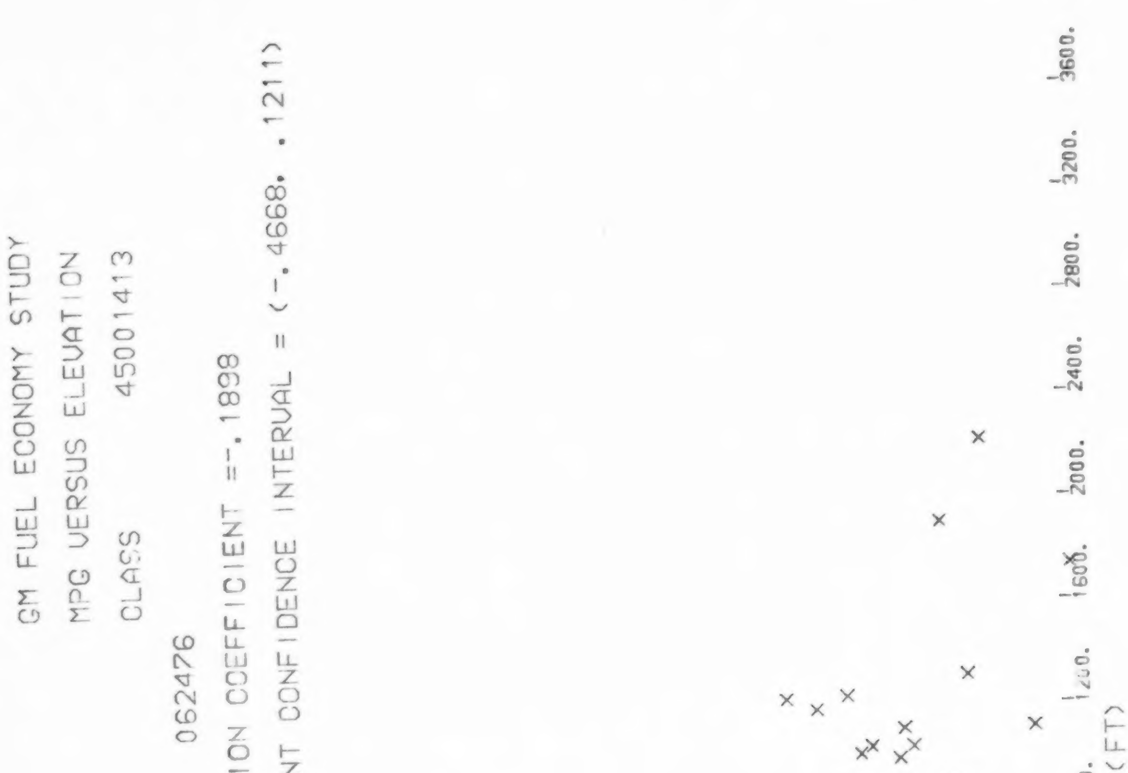
95 PERCENT CONFIDENCE INTERVAL = (.0307. .5773)

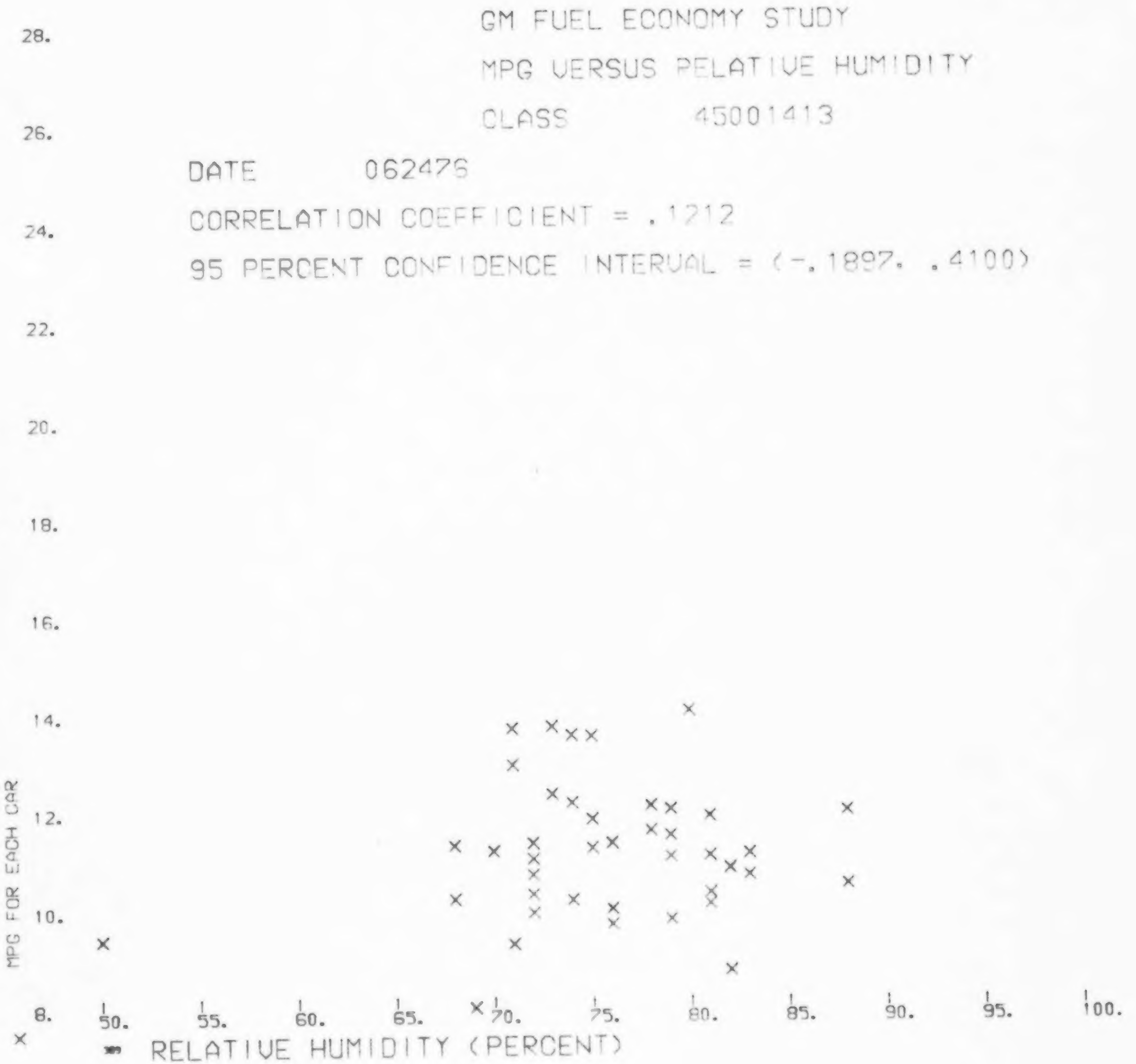




GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 45001413
DATE 062476
CORRELATION COEFFICIENT = .0324
95 PERCENT CONFIDENCE INTERVAL = (-.2742. .3331)

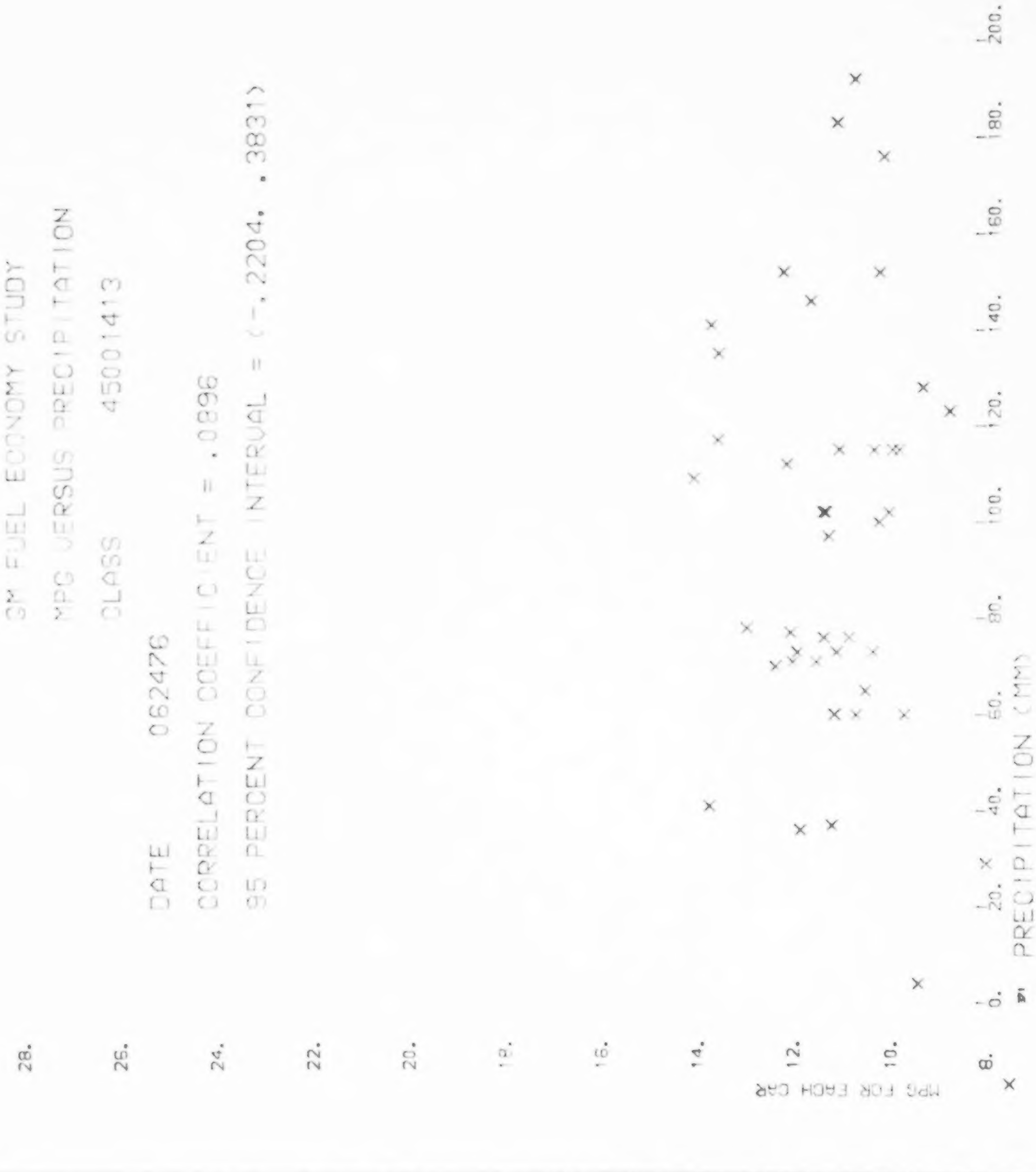

GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 45001413
DATE 062476
CORRELATION COEFFICIENT =-.1868
95 PERCENT CONFIDENCE INTERVAL = (-.4644, .1242)
MPG FOR EACH CAR
8.
10.
12.
14.
16.
18.
20.
22.
24.
26.
28.
.80
1.2
1.6
2.
2.4
2.8
3.2
3.6
4.
4.4
4.8
TERRAIN INDEX


GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 45001413
DATE 062476
CORRELATION COEFFICIENT =-.1898
95 PERCENT CONFIDENCE INTERVAL = (-.4668. .1211)
MPG FOR EACH CAR
8.
10.
12.
14.
16.
18.
20.
22.
24.
26.
28.
ELEVATION (FT)
0.
400.
800.
1200.
1600.
2000.
2400.
2800.
3200.
3600.
4000.



GM FUEL ECONOMY STUDY
MPG VERSUS PELATIVE HUMIDITY
CLASS 45001413

DATE 062476
CORRELATION COEFFICIENT = .1212
95 PERCENT CONFIDENCE INTERVAL = (-.1897, .4100)


GM FUEL ECONOMY STUDY

MPG VERSUS PRECIPITATION

CLASS 45001413

DATE 062476

CORRELATION COEFFICIENT = .0896

95 PERCENT CONFIDENCE INTERVAL = (-.2204, .3831)

GM FUEL ECONOMY STUDY

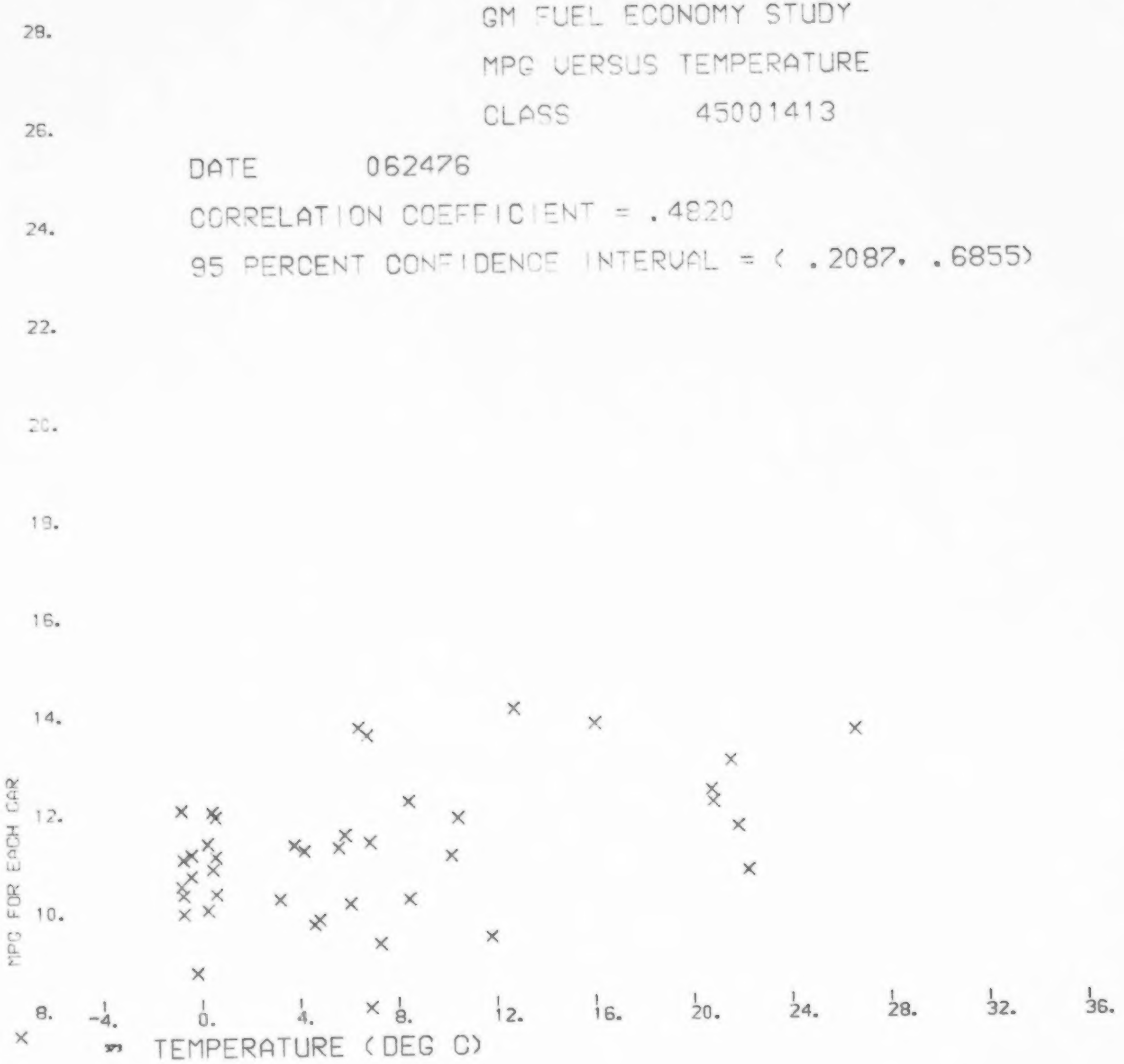
MPG VERSUS TEMPERATURE

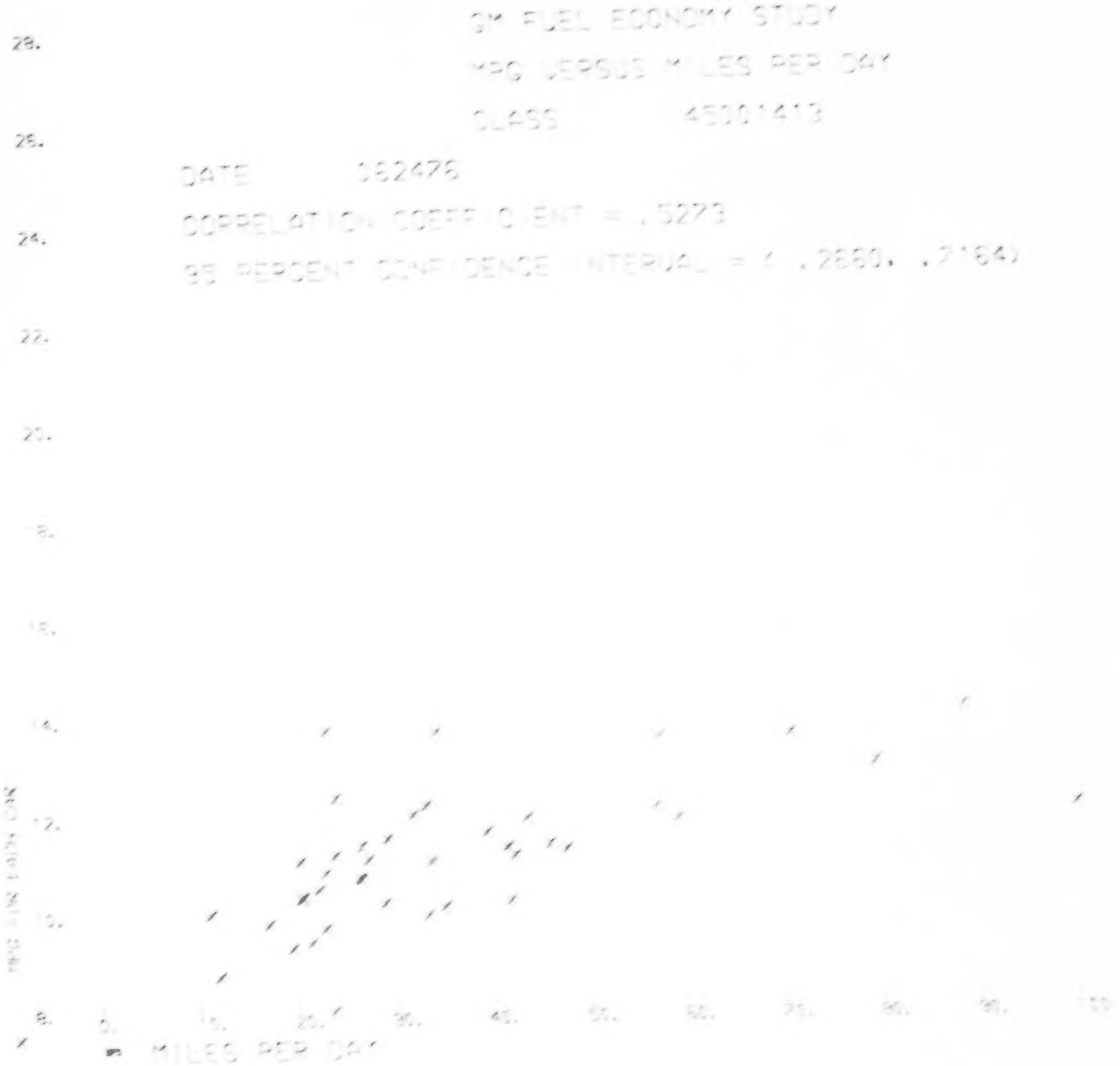
CLASS 45001413

DATE 062476

CORRELATION COEFFICIENT = .4820

95 PERCENT CONFIDENCE INTERVAL = (.2087, .6855)





GM FUEL ECONOMY STUDY

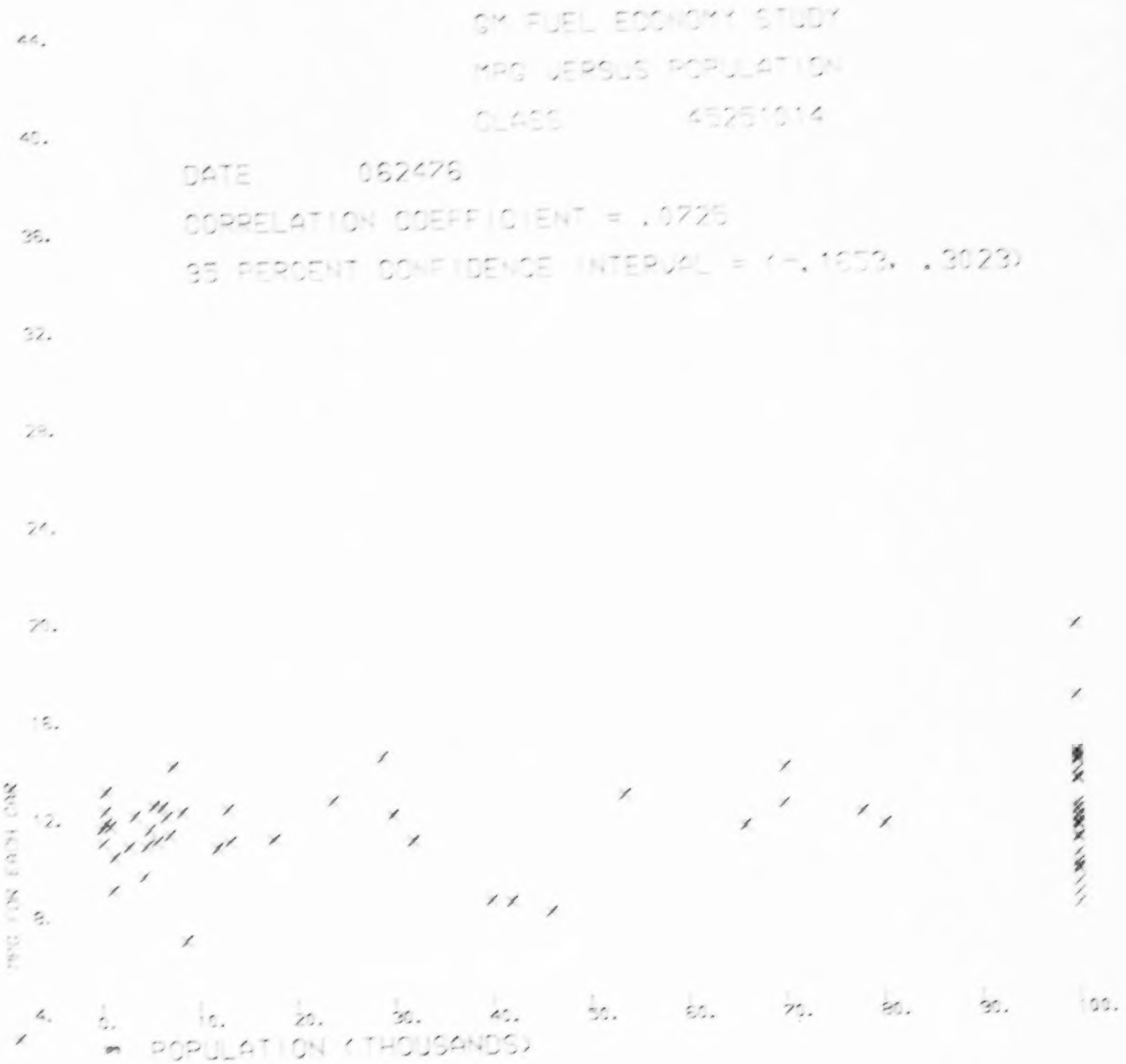
MPG VERSUS MILES PER DAY

CLASS 45001413

DATE 062476

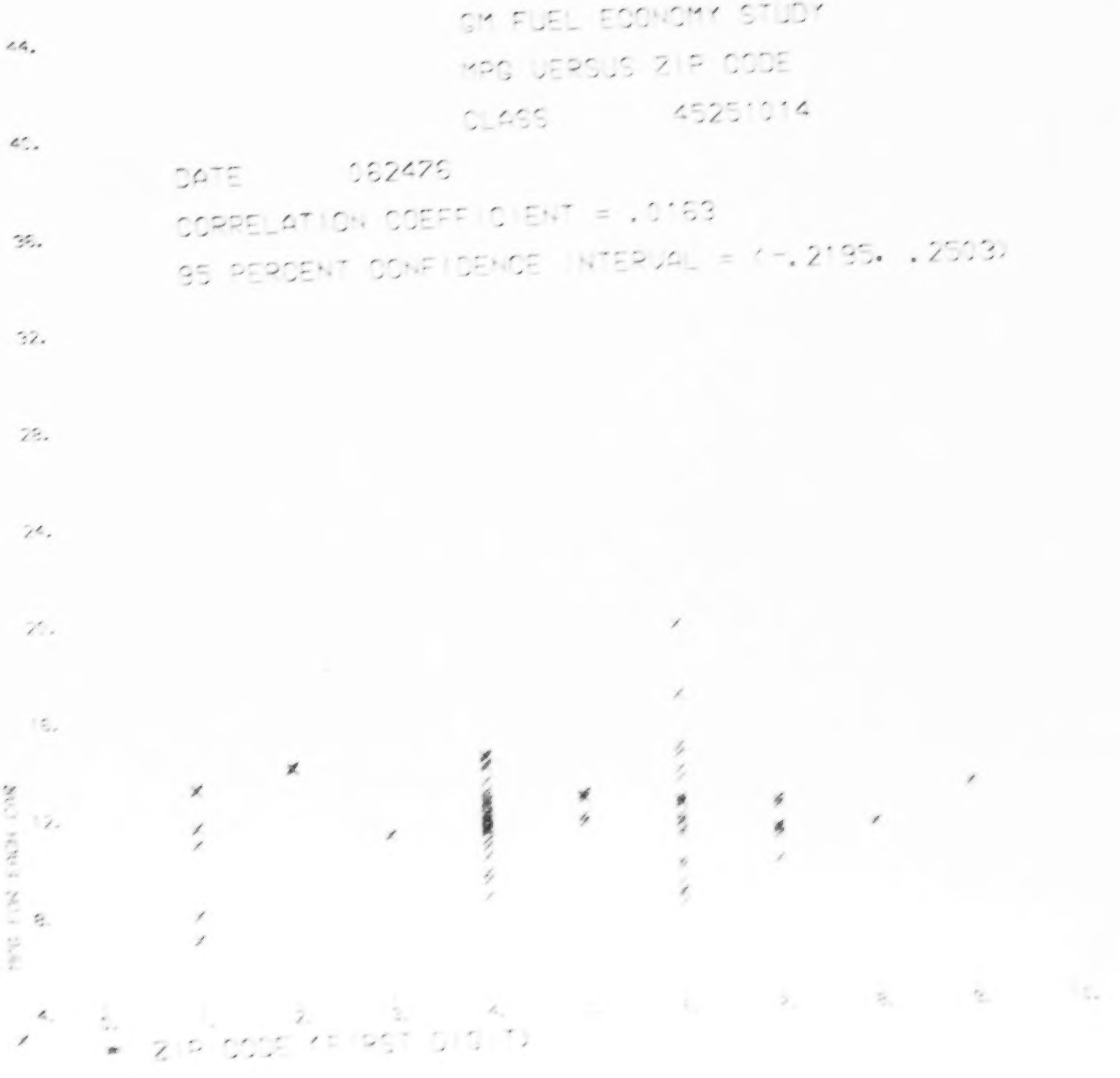
CORRELATION COEFFICIENT = .5273

95 PERCENT CONFIDENCE INTERVAL = (.2660, .7164)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 45251014

DATE 062476
CORRELATION COEFFICIENT = .0725
95 PERCENT CONFIDENCE INTERVAL = (-.1653, .3023)



GM FUEL ECONOMY STUDY

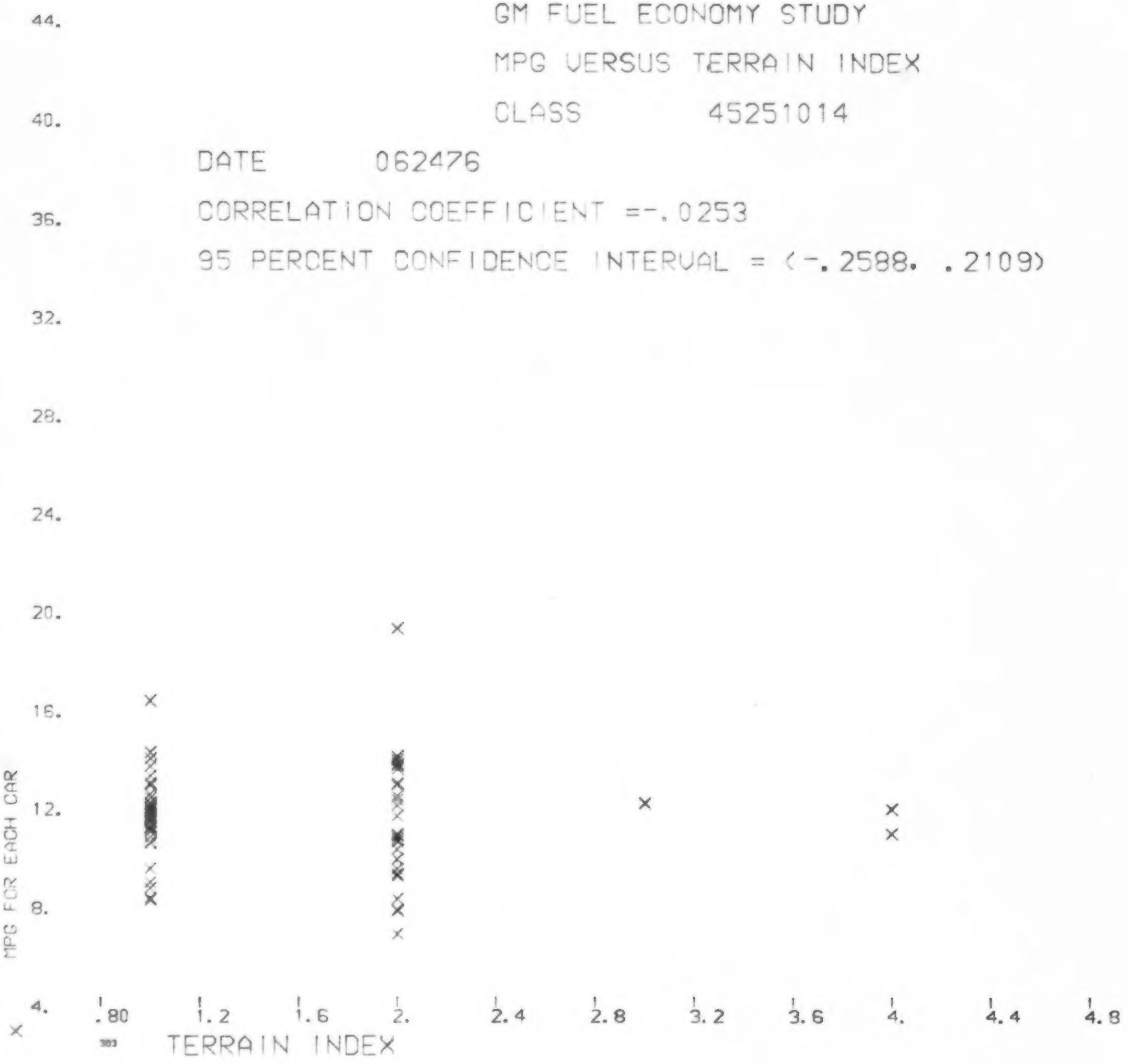
MPG VERSUS ZIP CODE

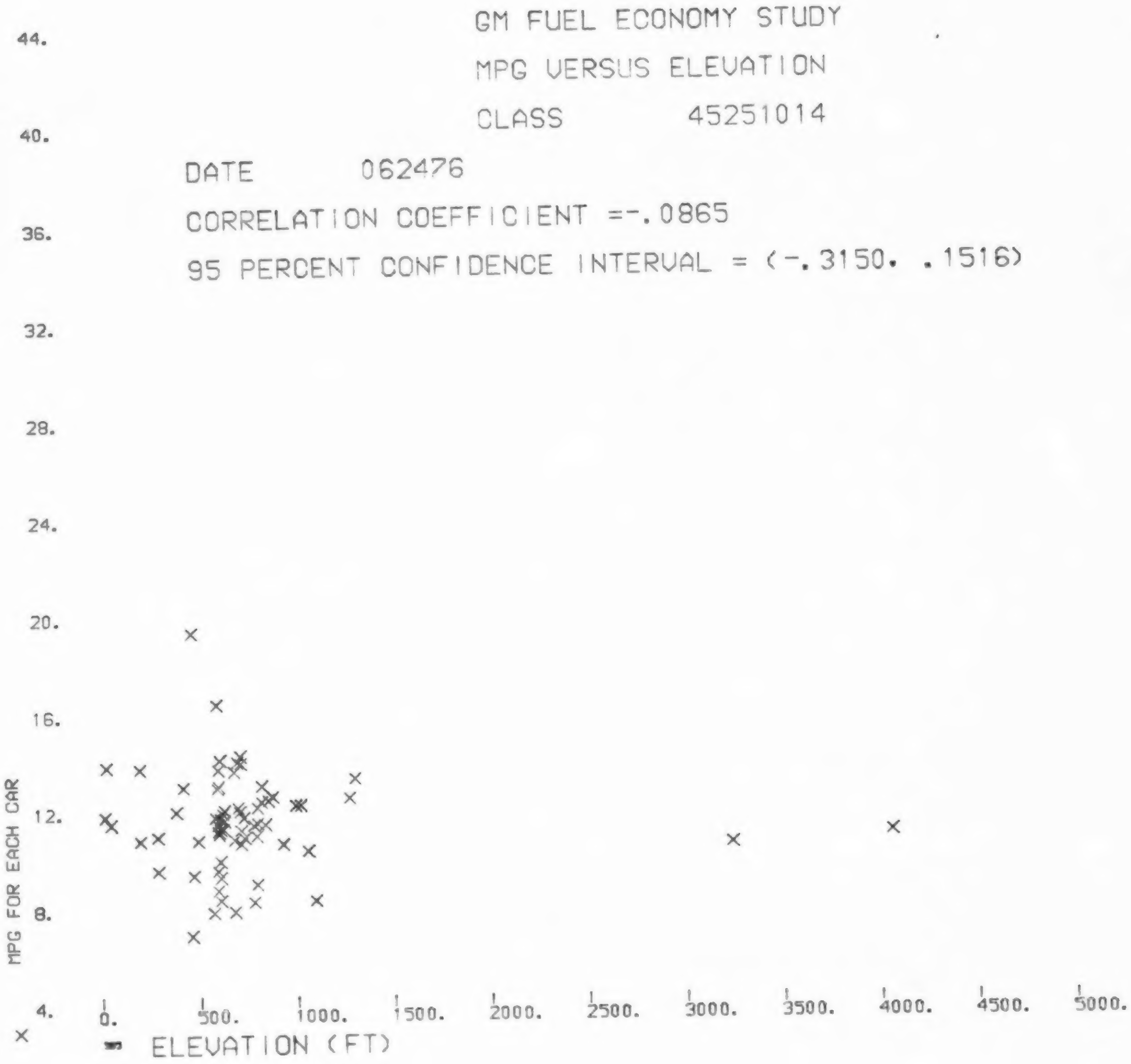
CLASS 45251014

DATE 062476

CORRELATION COEFFICIENT = .0163

95 PERCENT CONFIDENCE INTERVAL = (-.2195, .2503)


GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 45251014
DATE 062476
CORRELATION COEFFICIENT =-.0253
95 PERCENT CONFIDENCE INTERVAL = (-.2588. .2109)

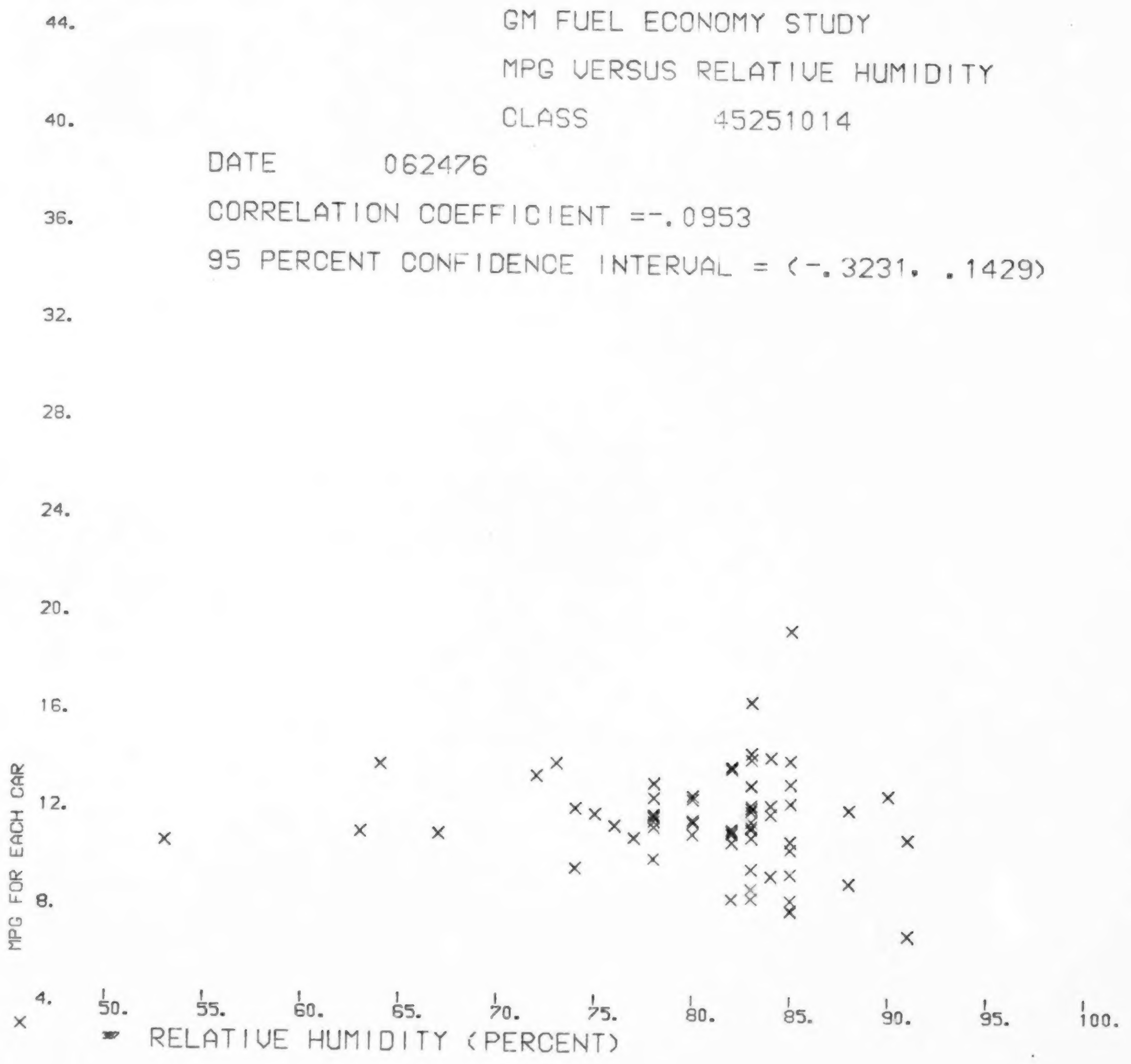


GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 45251014

DATE 062476
CORRELATION COEFFICIENT =-.0865
95 PERCENT CONFIDENCE INTERVAL = (-.3150. .1516)

GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 45251014

DATE 062476
CORRELATION COEFFICIENT =-.0953
95 PERCENT CONFIDENCE INTERVAL = (-.3231. .1429)



GM FUEL ECONOMY STUDY

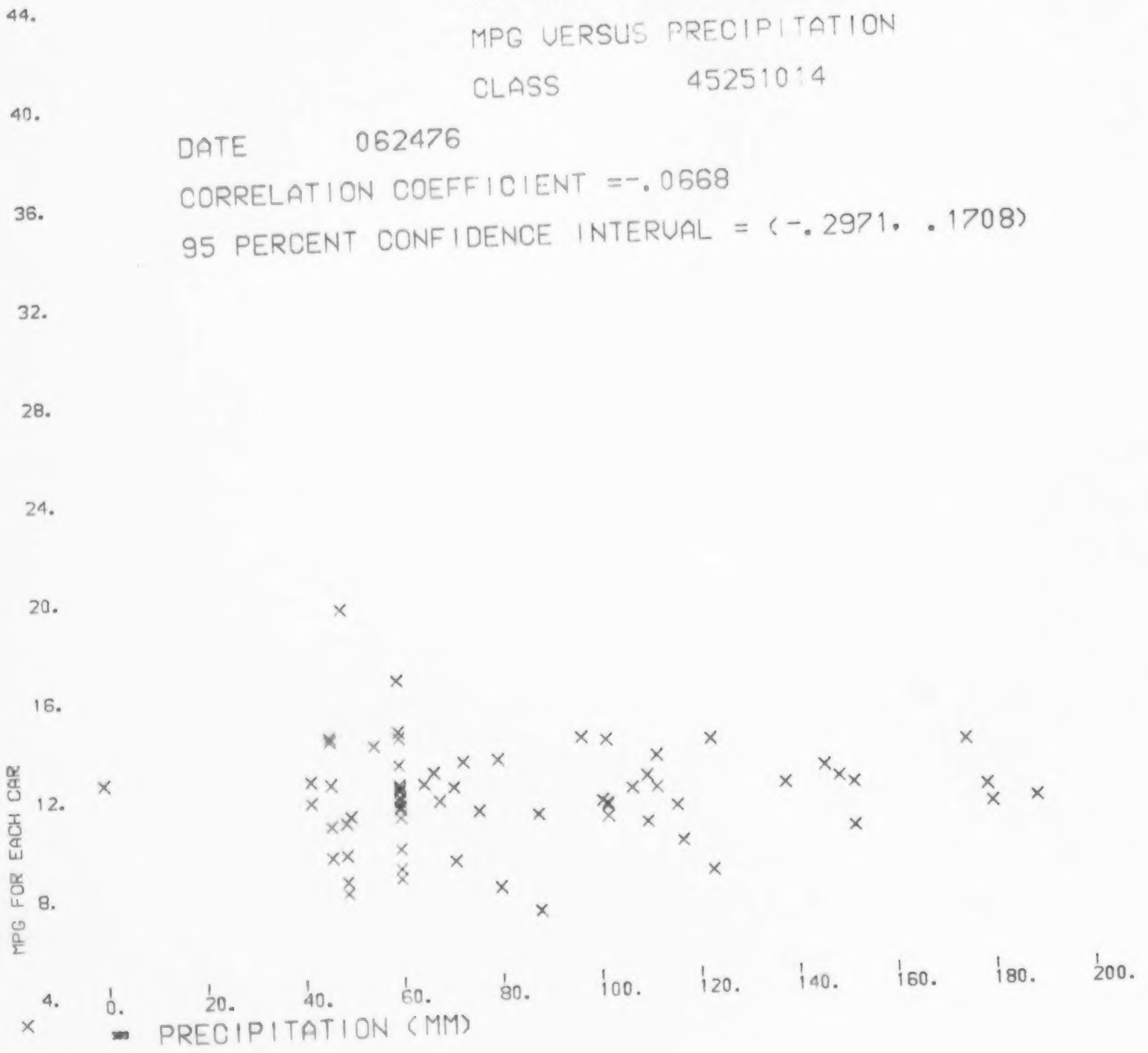
MPG VERSUS PRECIPITATION

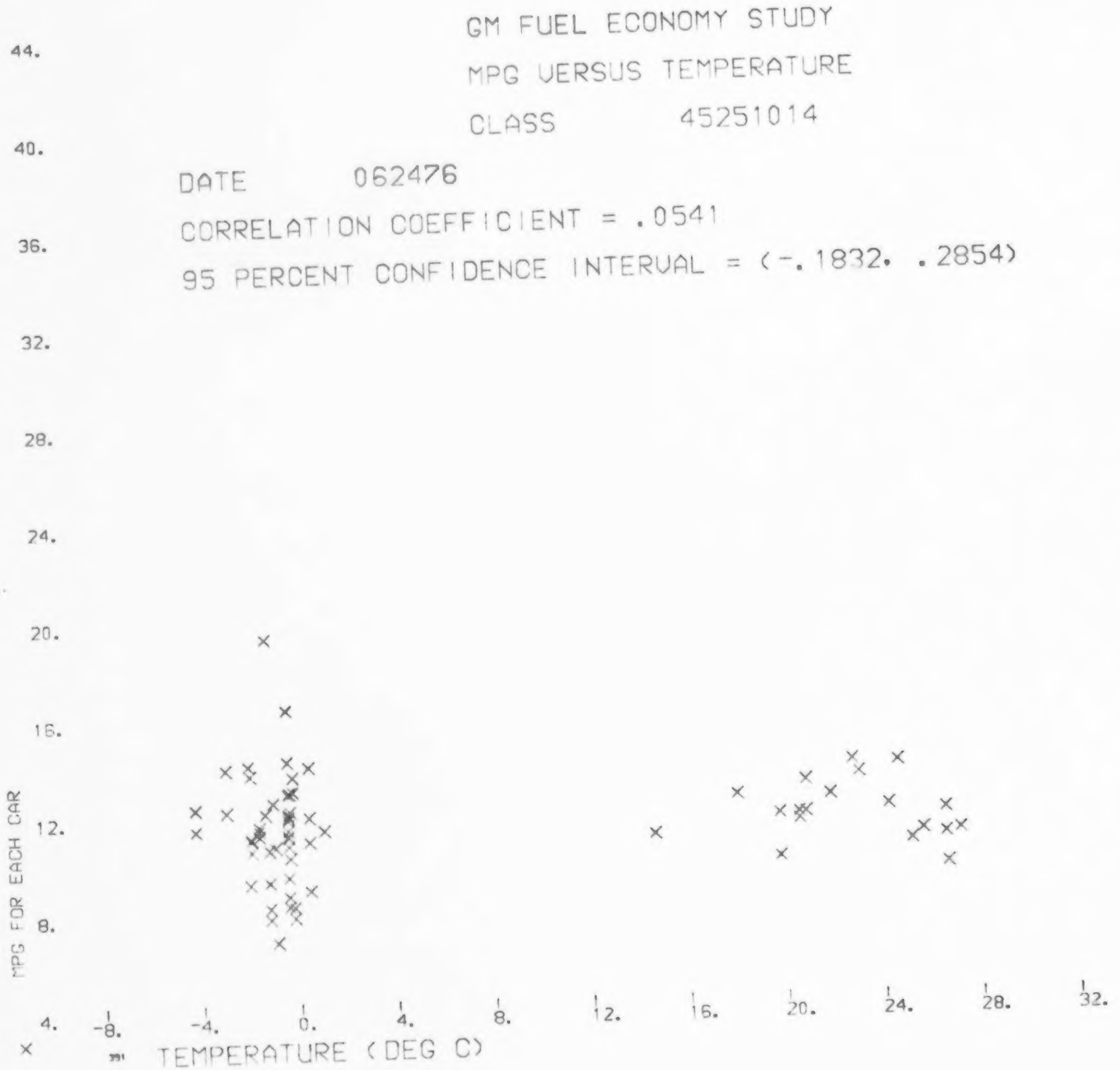
CLASS 45251014

DATE 062476

CORRELATION COEFFICIENT =-.0668

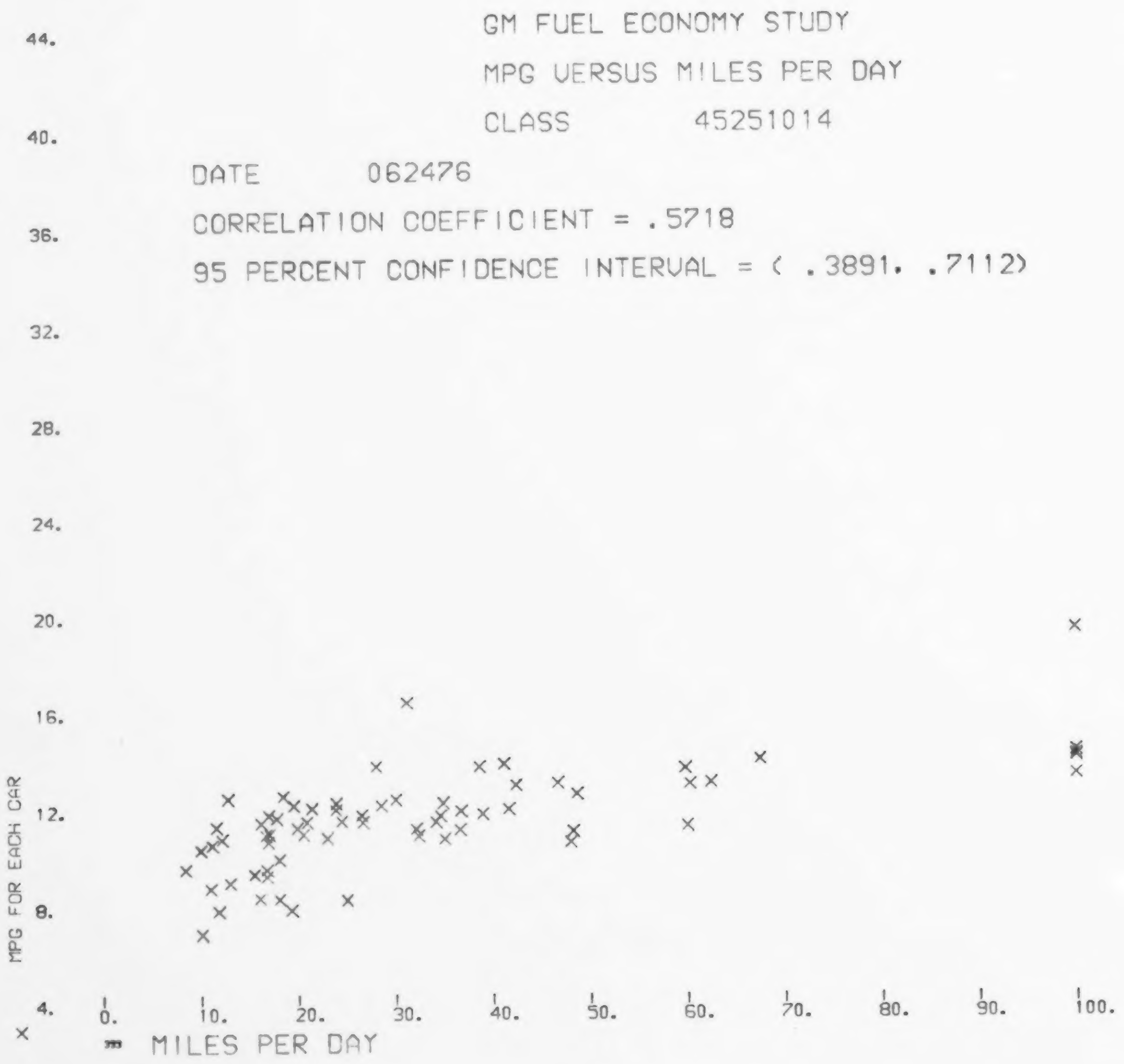
95 PERCENT CONFIDENCE INTERVAL = (-.2971, .1708)



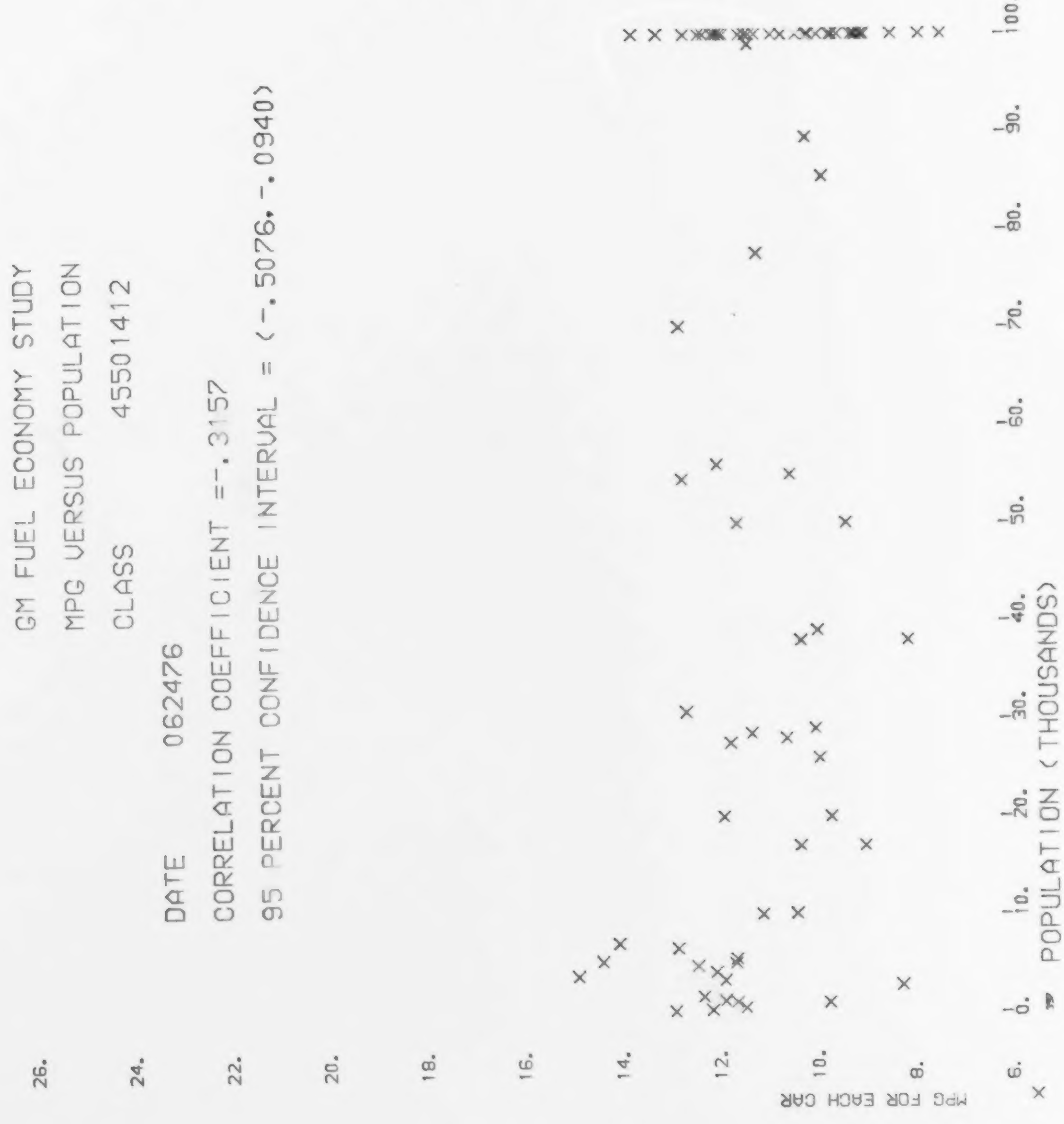


GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 45251014

DATE 062476
CORRELATION COEFFICIENT = .0541
95 PERCENT CONFIDENCE INTERVAL = (-.1832. .2854)

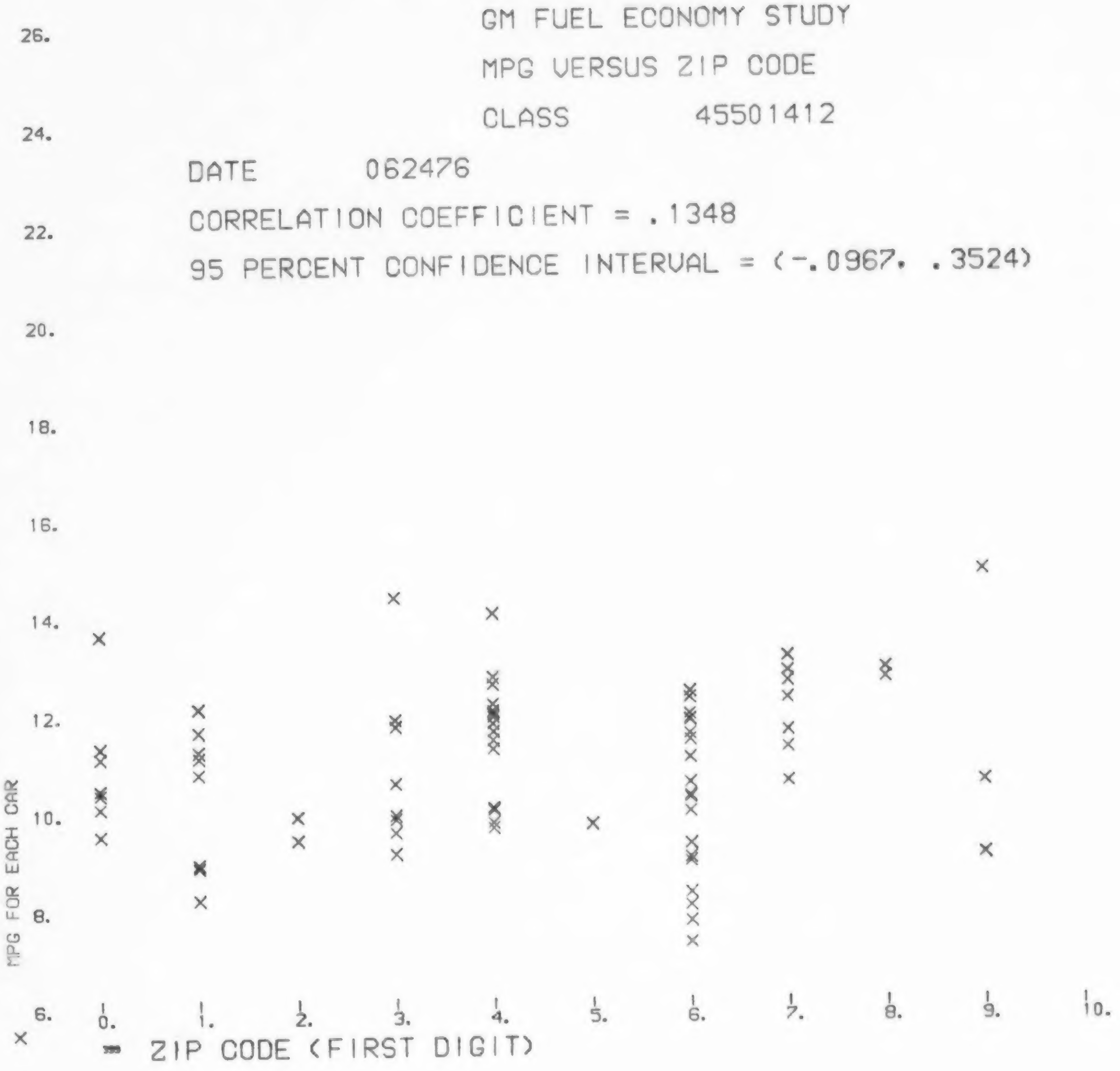


GM FUEL ECONOMY STUDY
MPG VERSUS MILES PER DAY
CLASS 45251014
DATE 062476
CORRELATION COEFFICIENT = .5718
95 PERCENT CONFIDENCE INTERVAL = (.3891. .7112)



GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 45501412

DATE 062476
CORRELATION COEFFICIENT =-.3157
95 PERCENT CONFIDENCE INTERVAL = (-.5076, -.0940)

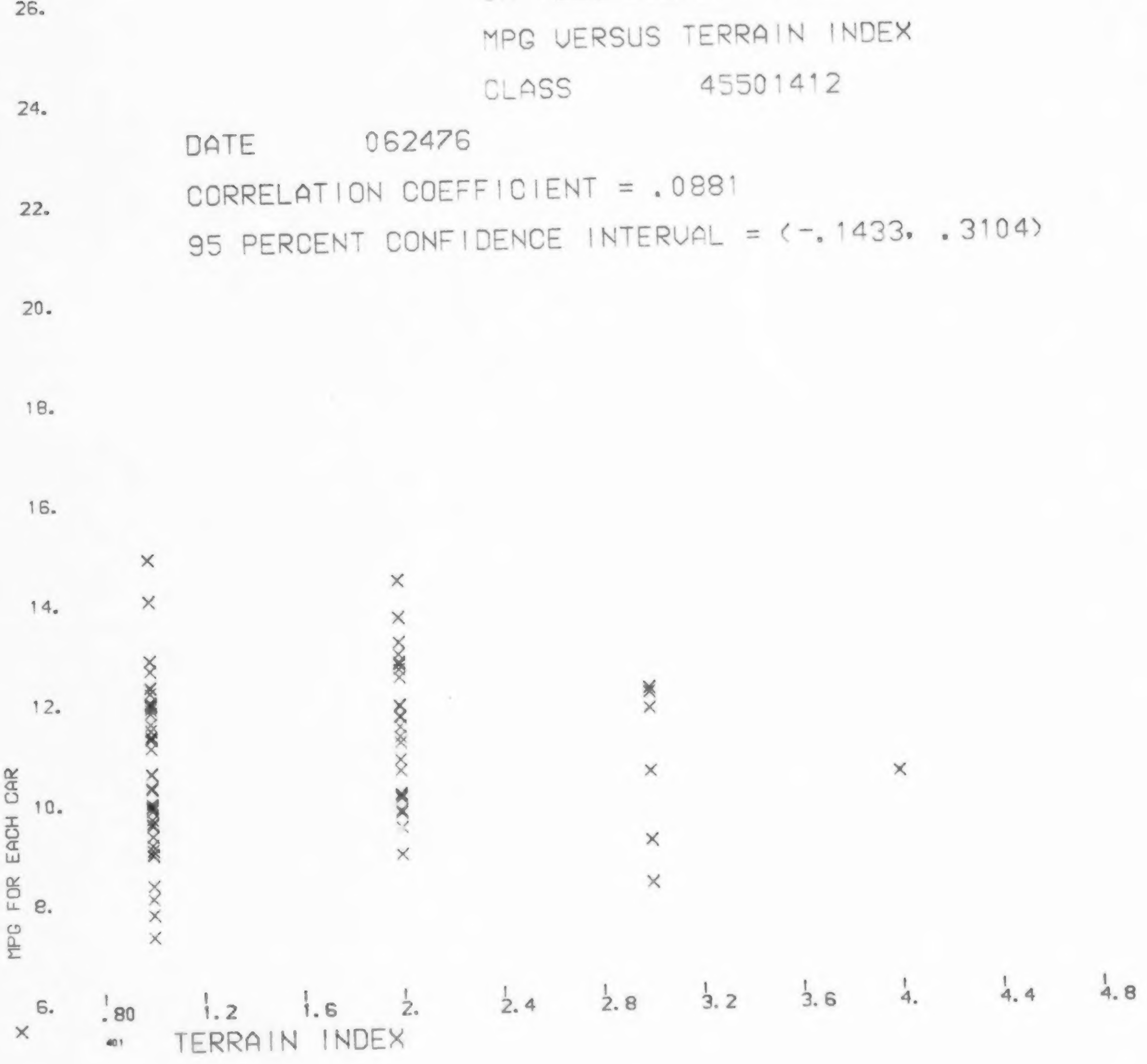


GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 45501412

DATE 062476
CORRELATION COEFFICIENT = .1348
95 PERCENT CONFIDENCE INTERVAL = (-.0967, .3524)

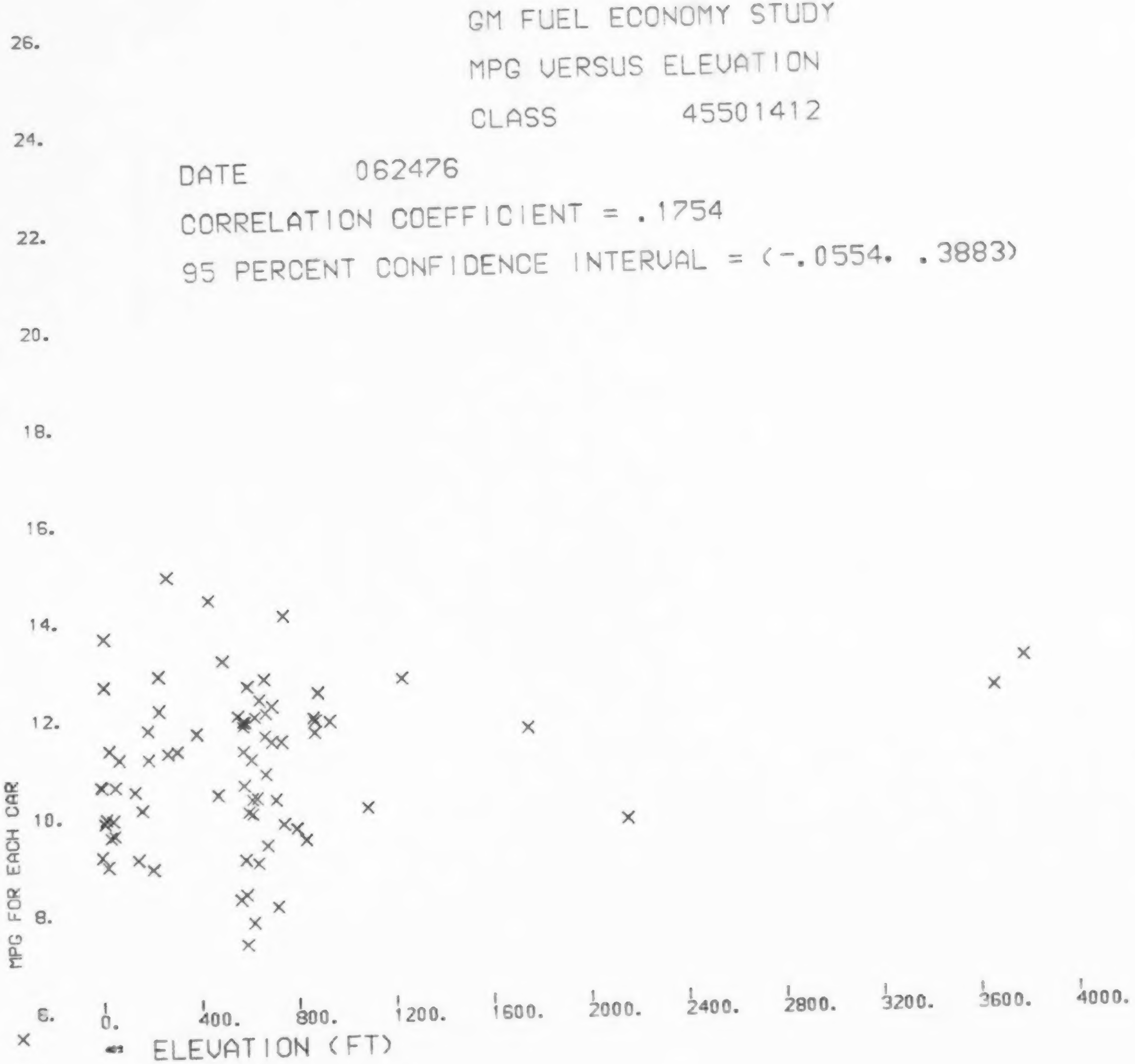
GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 45501412

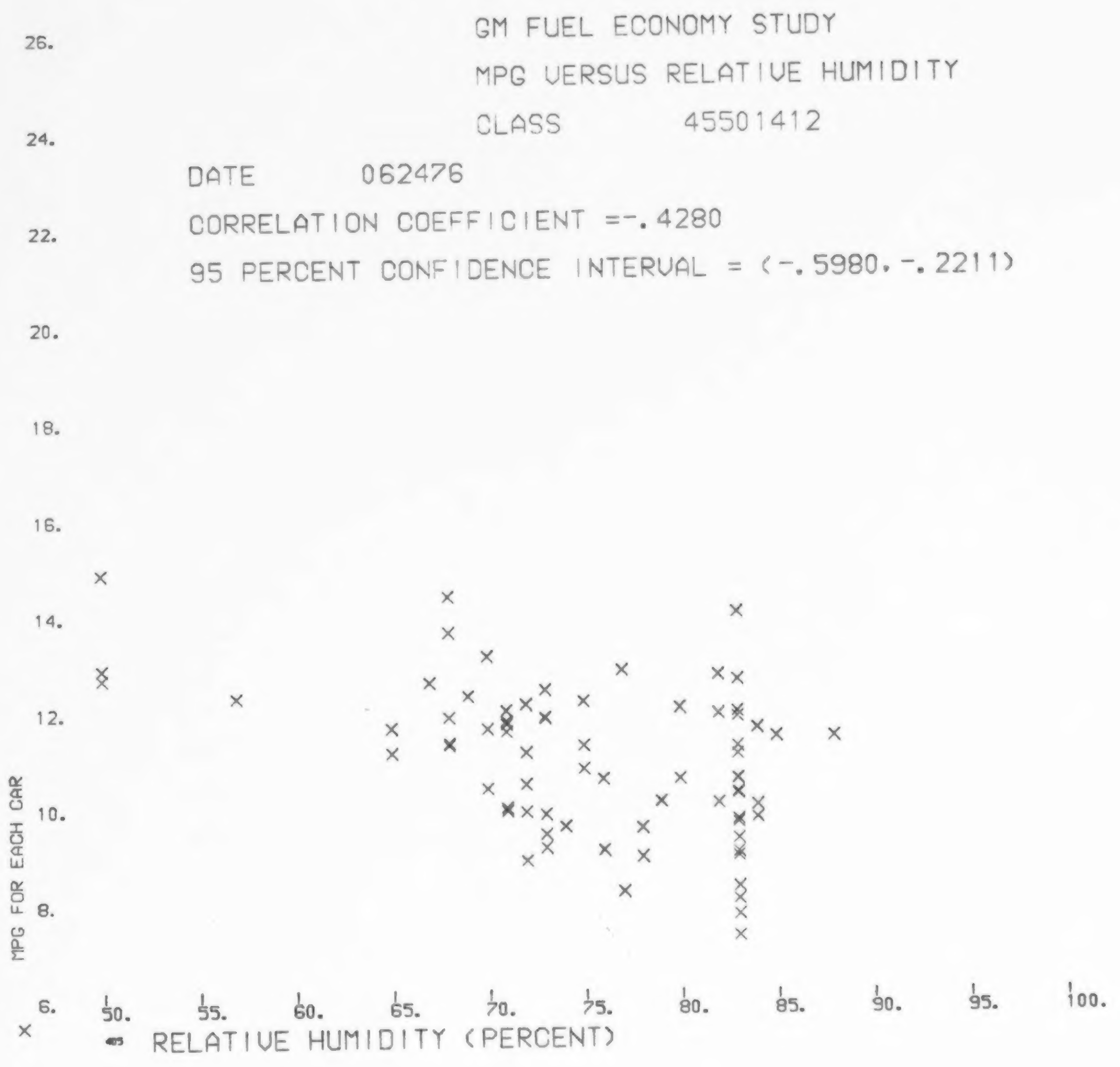
DATE 062476
CORRELATION COEFFICIENT = .0881
95 PERCENT CONFIDENCE INTERVAL = (-.1433, .3104)



GM FUEL ECONOMY STUDY
MPG VERSUS ELEVATION
CLASS 45501412

DATE 062476
CORRELATION COEFFICIENT = .1754
95 PERCENT CONFIDENCE INTERVAL = (-.0554. .3883)





GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 45501412

DATE 062476
CORRELATION COEFFICIENT =-.4280
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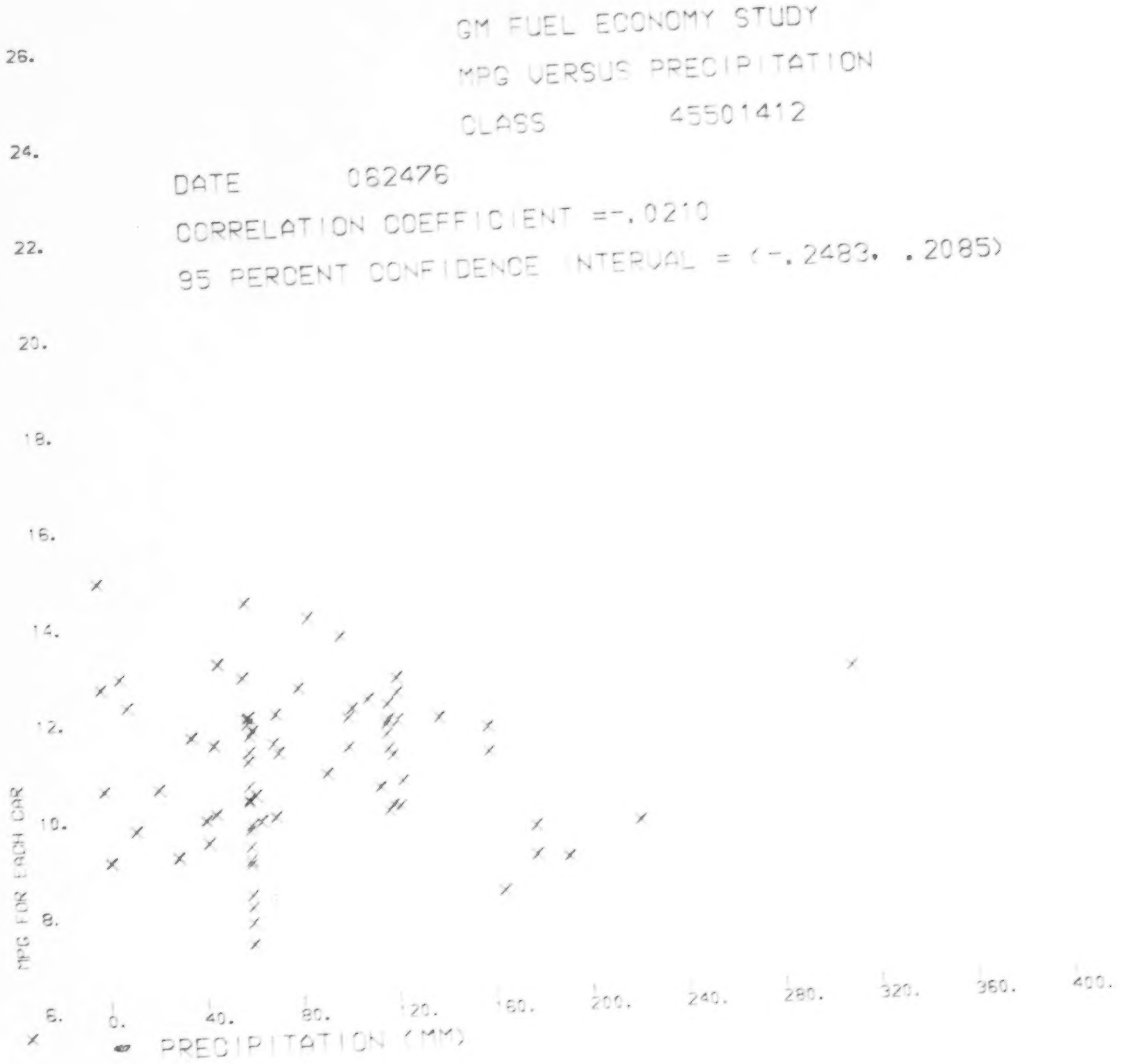

GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 45501412

DATE 062476
CORRELATION COEFFICIENT =-.0210
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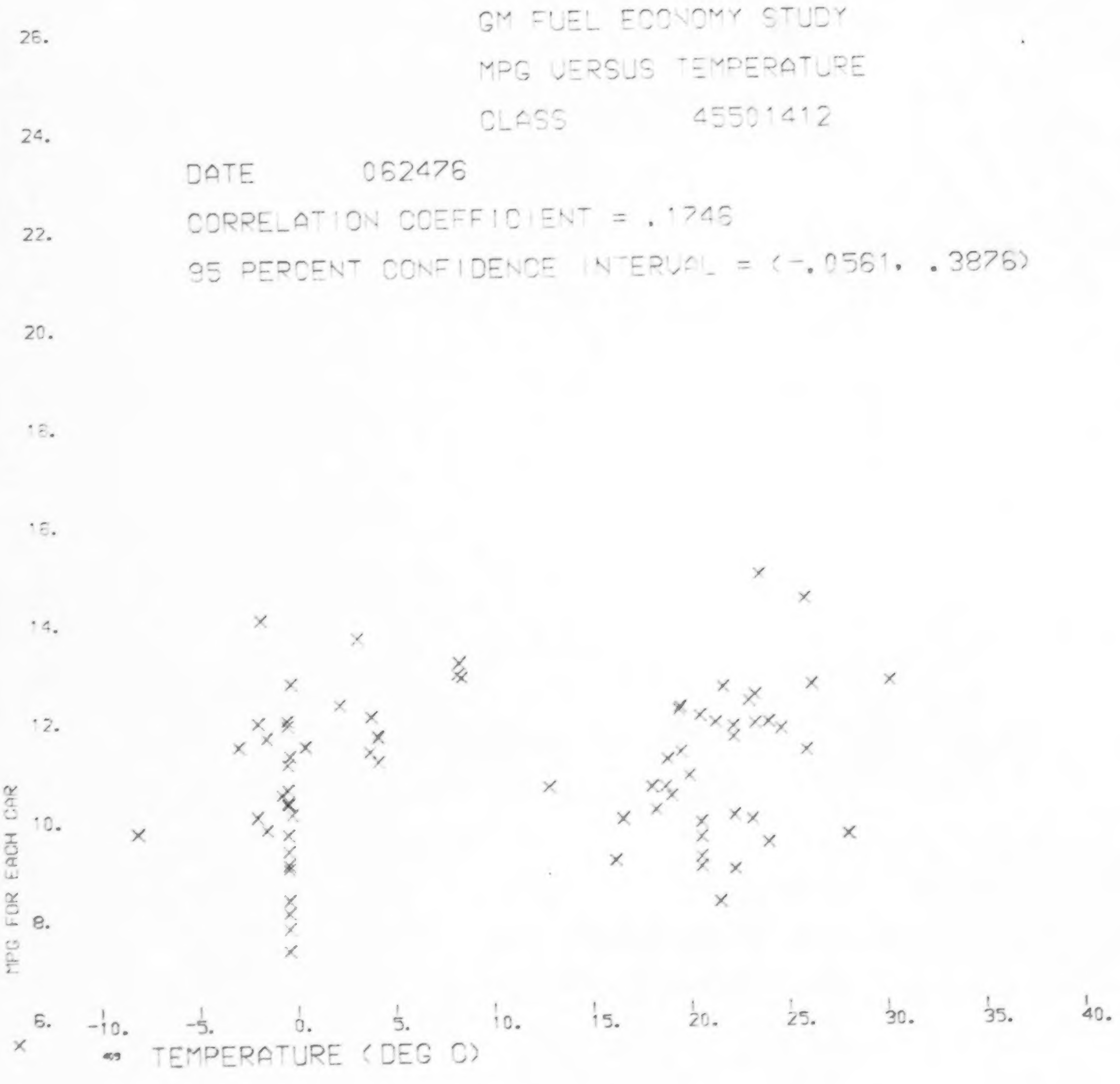
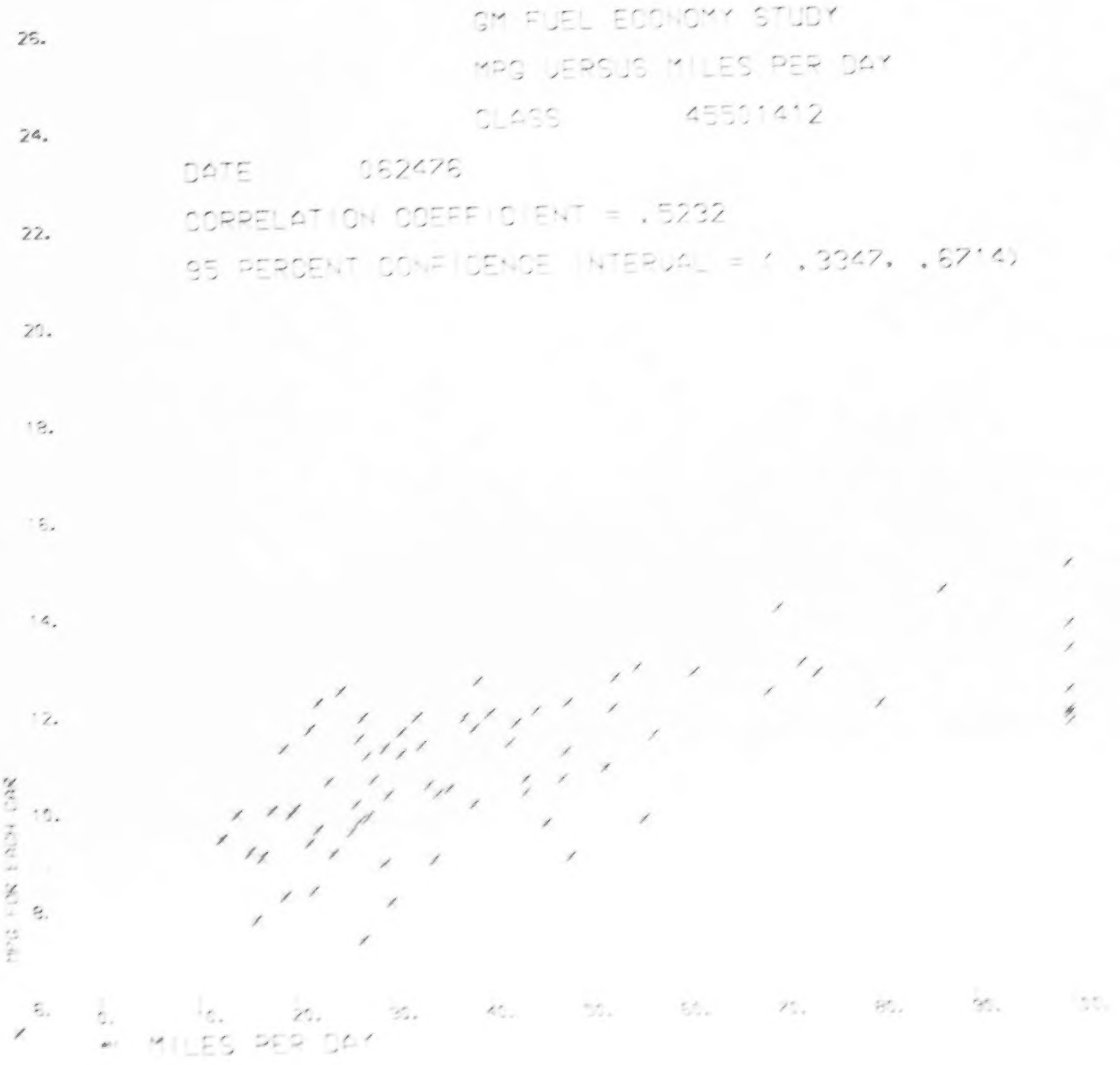


GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 45501412

DATE 062476
CORRELATION COEFFICIENT = .1746
95 PERCENT CONFIDENCE INTERVAL = (-.0561, .3876)



GM FUEL ECONOMY STUDY

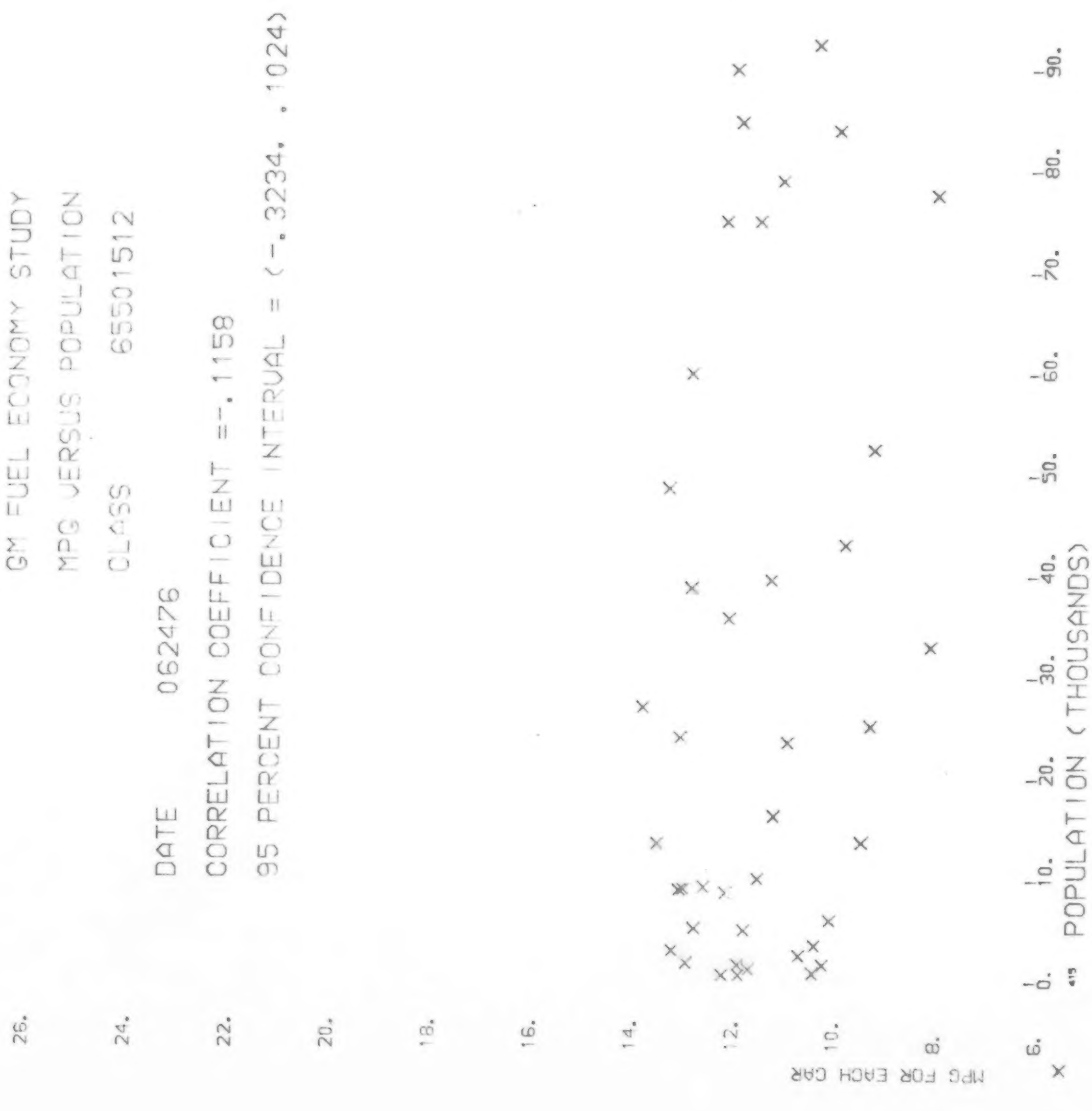
MPG VERSUS MILES PER DAY

CLASS 45501412

DATE 062476

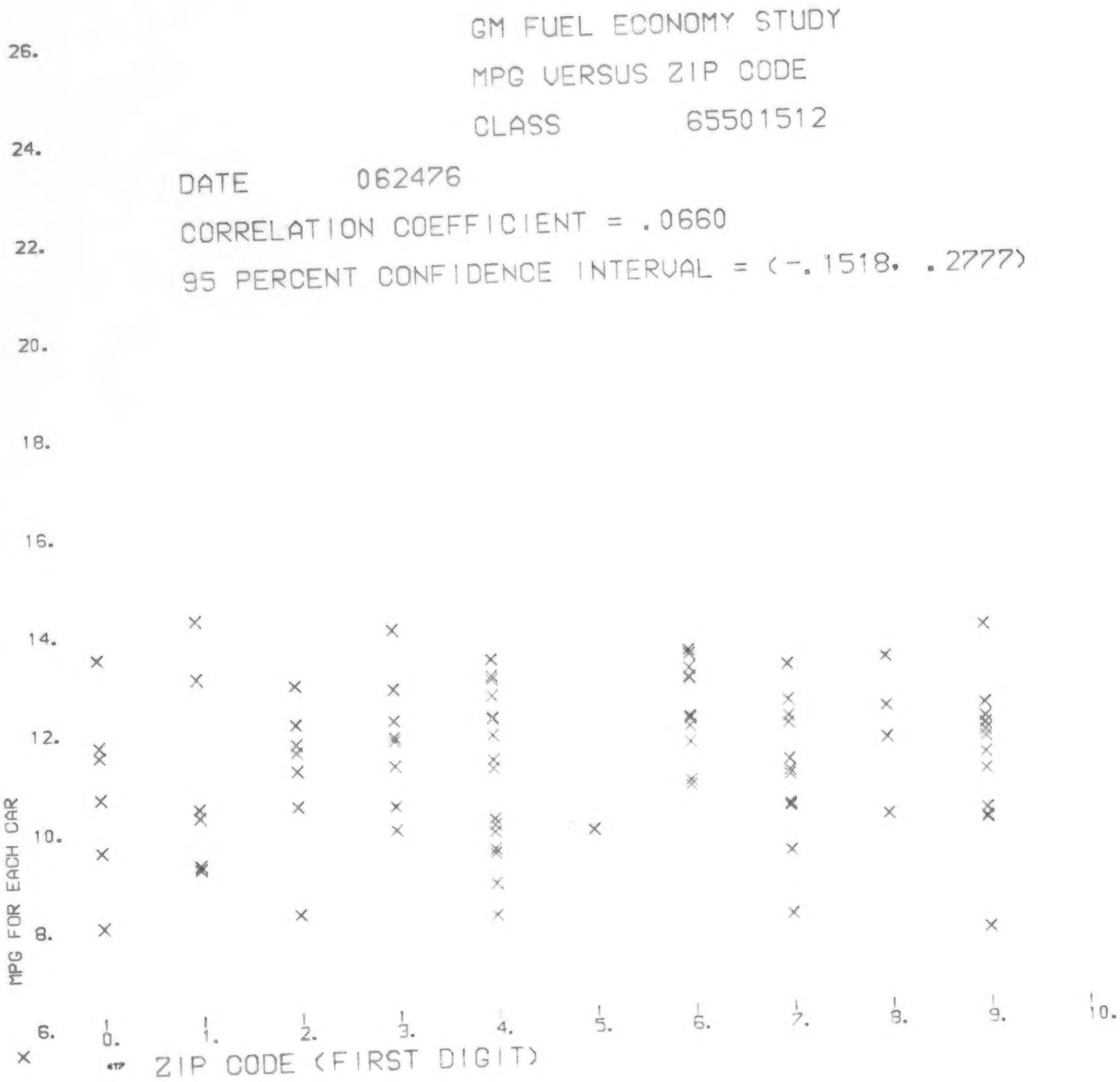
CORRELATION COEFFICIENT = .5232

95 PERCENT CONFIDENCE INTERVAL = (.3347, .6714)



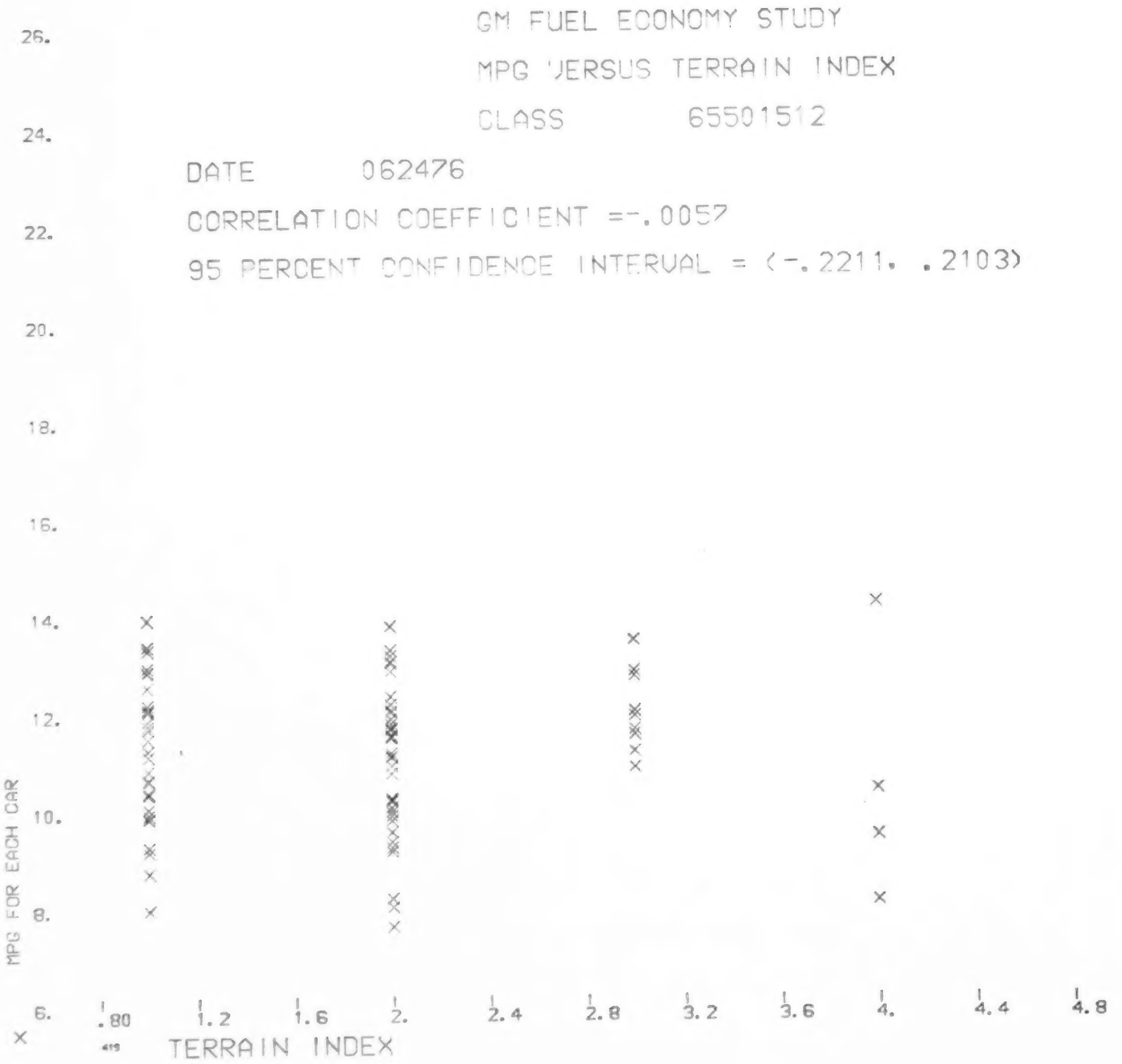
GM FUEL ECONOMY STUDY
MPG VERSUS POPULATION
CLASS 65501512

DATE 062476
CORRELATION COEFFICIENT =-.1158
95 PERCENT CONFIDENCE INTERVAL = (-.3234, .1024)

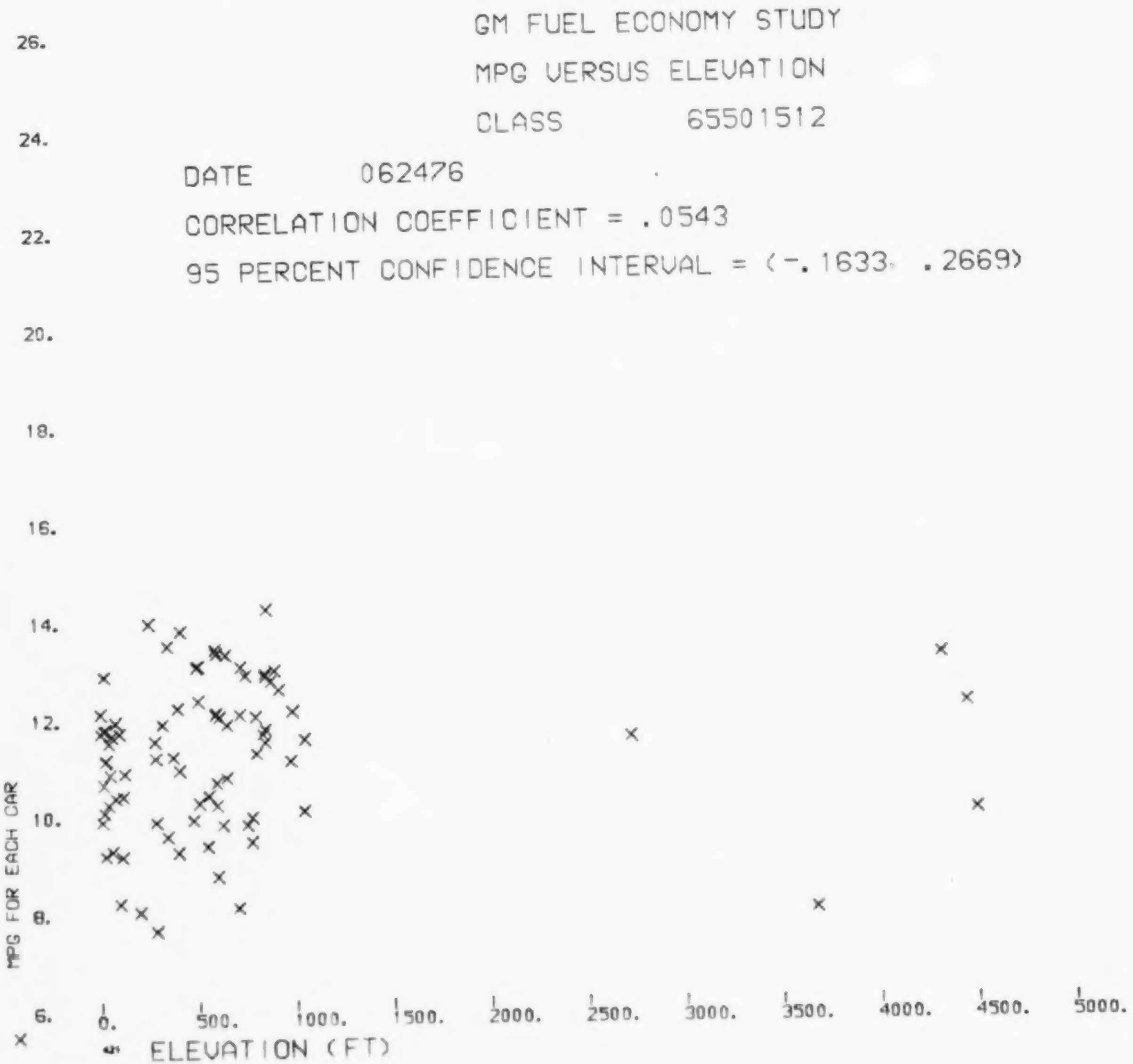


GM FUEL ECONOMY STUDY
MPG VERSUS ZIP CODE
CLASS 65501512

DATE 062476
CORRELATION COEFFICIENT = .0660
95 PERCENT CONFIDENCE INTERVAL = (-.1518, .2777)



GM FUEL ECONOMY STUDY
MPG VERSUS TERRAIN INDEX
CLASS 65501512
DATE 062476
CORRELATION COEFFICIENT =-.0057
95 PERCENT CONFIDENCE INTERVAL = (-.2211, .2103)



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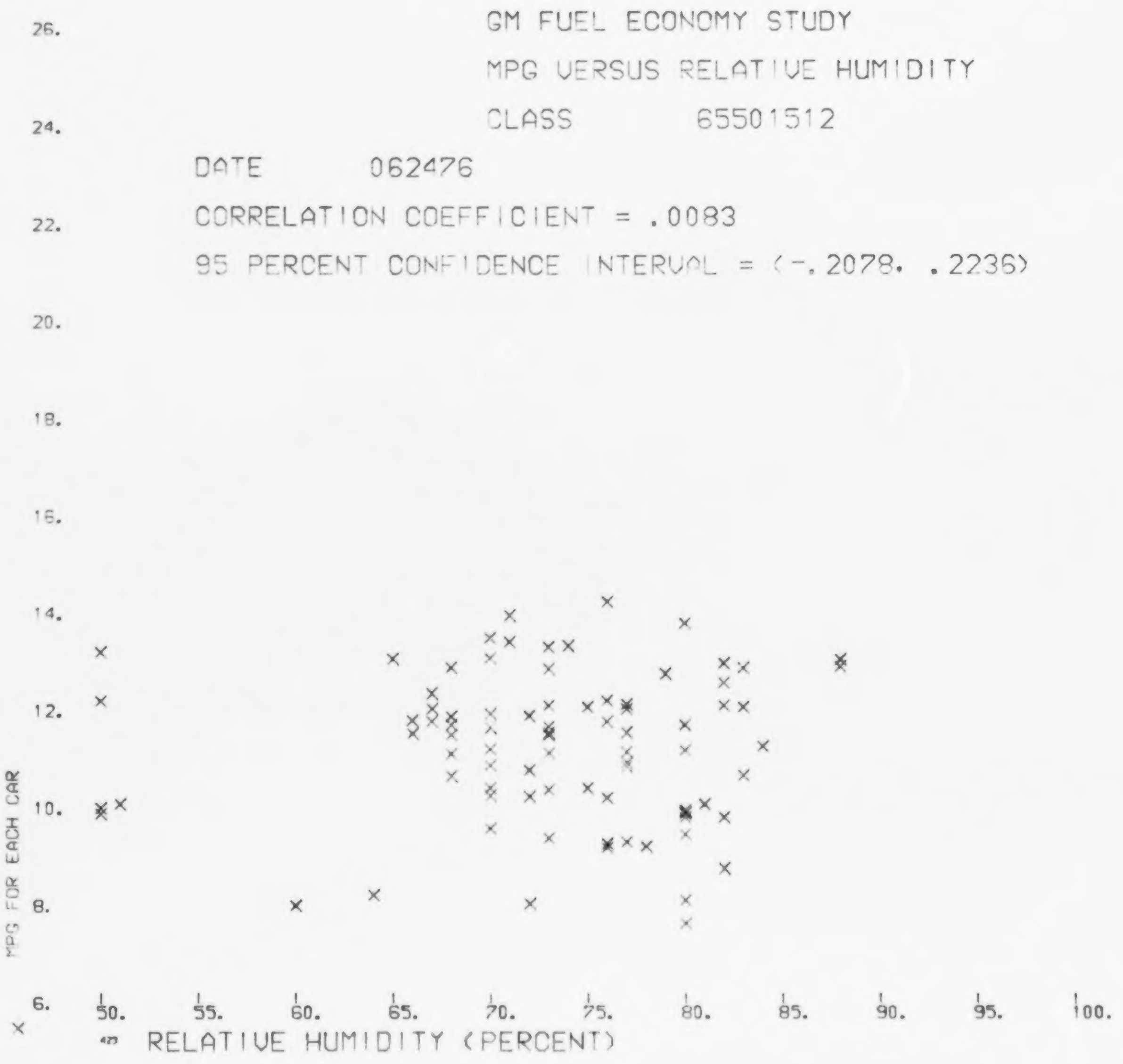
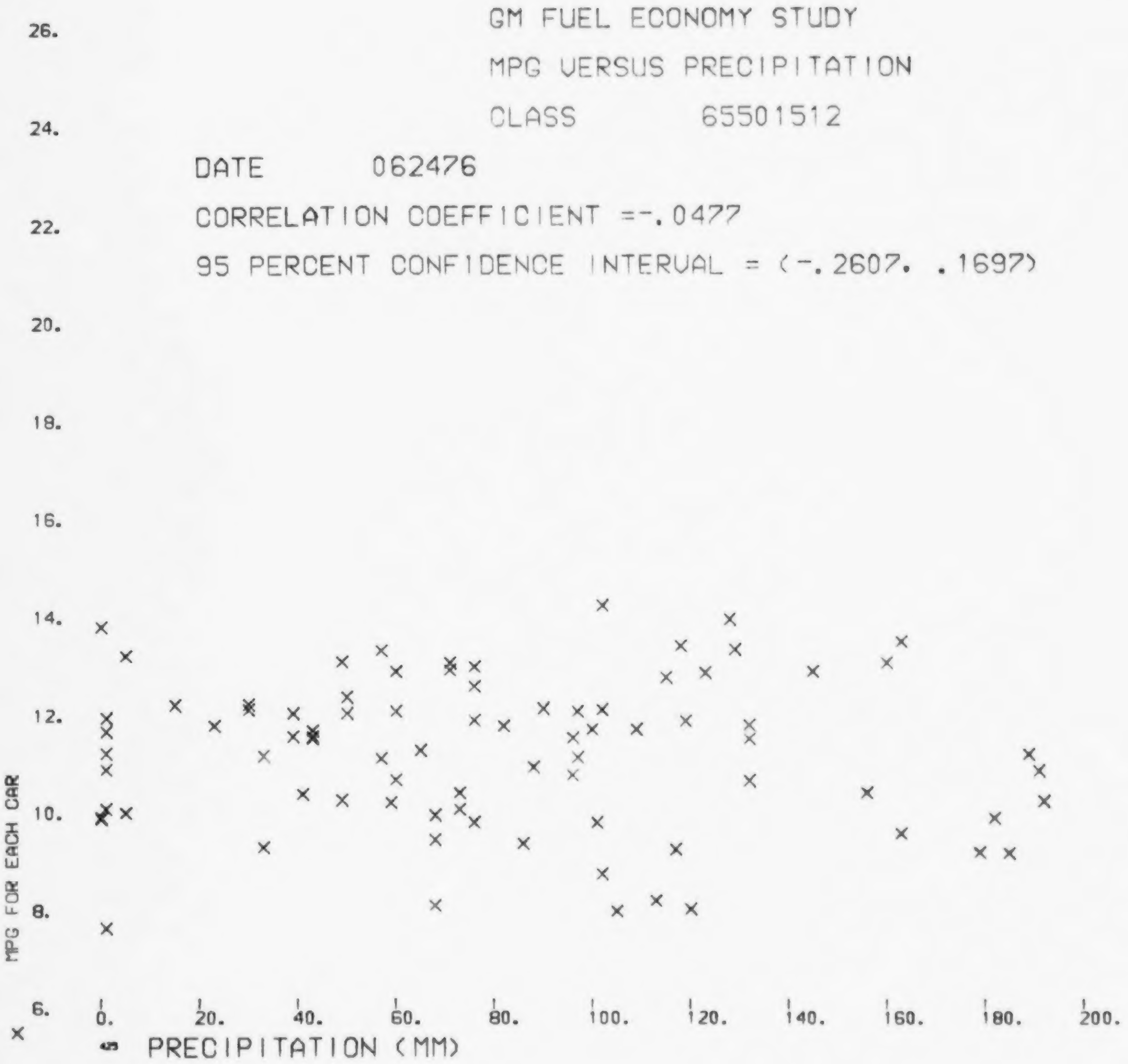
MPG VERSUS ELEVATION
CLASS 65501512
DATE 062476
CORRELATION COEFFICIENT = .0543
95 PERCENT CONFIDENCE INTERVAL = (-.1633 .2669)



GM FUEL ECONOMY STUDY
MPG VERSUS RELATIVE HUMIDITY
CLASS 65501512

DATE 062476
CORRELATION COEFFICIENT = .0083
95 PERCENT CONFIDENCE INTERVAL = (-.2078, .2236)



GM FUEL ECONOMY STUDY
MPG VERSUS PRECIPITATION
CLASS 65501512

DATE 062476
CORRELATION COEFFICIENT =-.0477
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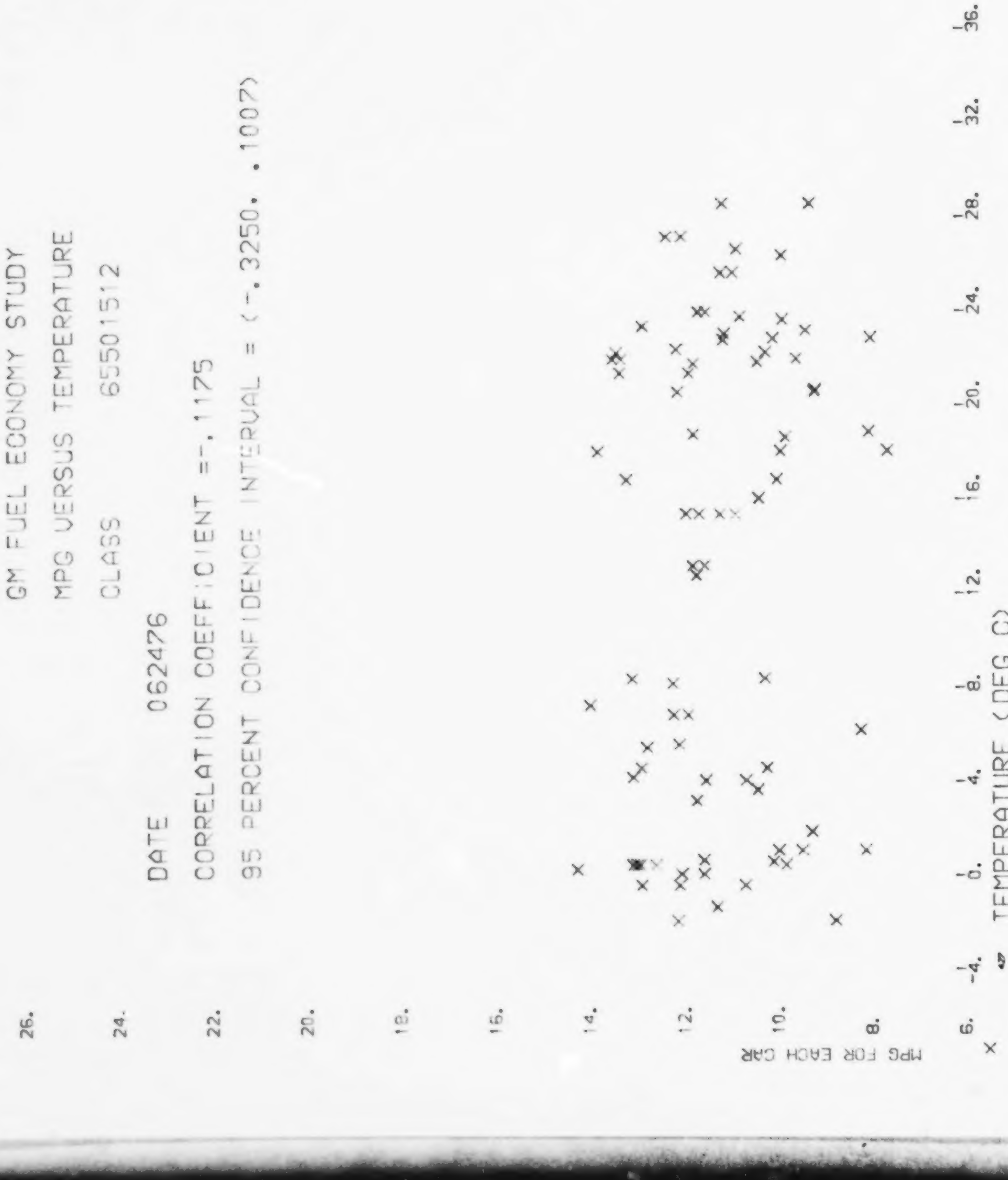
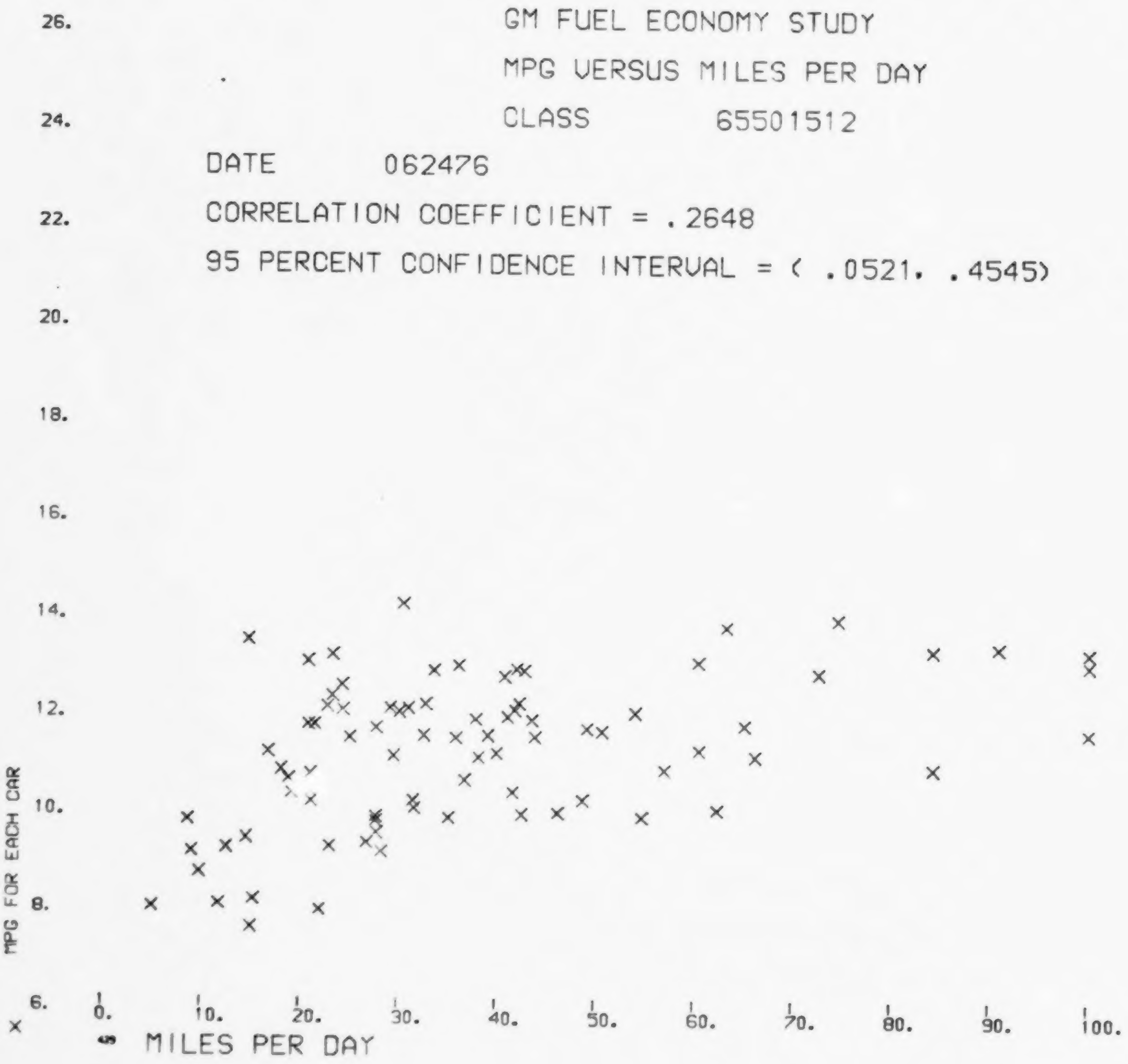


GM FUEL ECONOMY STUDY
MPG VERSUS TEMPERATURE
CLASS 65501512

DATE 062476
CORRELATION COEFFICIENT =-.1175
95 PERCENT CONFIDENCE INTERVAL = (-.3250, .1007)



GM FUEL ECONOMY STUDY

MPG VERSUS MILES PER DAY

CLASS 65501512

DATE 062476

CORRELATION COEFFICIENT = .2648

95 PERCENT CONFIDENCE INTERVAL = (.0521. .4545)

APPENDIX C

FORMULAS FOR COMPUTING FUEL ECONOMY AND TESTING FOR SIGNIFICANT DIFFERENCES IN FUEL ECONOMY

APPENDIX C

FORMULAS FOR COMPUTING FUEL ECONOMY AND TESTING FOR SIGNIFICANT DIFFERENCES IN FUEL ECONOMY[*]

Harmonic Mean Fuel Economy

$$\mathrm{HMFE} = \frac{1}{\overline{\mathrm{mpg}}}$$

where

$$\overline{\mathrm{mpg}} = \frac{1}{N} \sum_{i=1}^{N} \frac{1}{\mathrm{mpg}_i}$$

N = number of cars per class

mpg_i = miles/gallon for ith car in a class

Test Statistic

It can be shown that the following quantity is distributed as a chi-square with α level of confidence and one degree of freedom:

$$G = \left(\frac{1}{\overline{\mathrm{mpg}_1}} - \frac{1}{\overline{\mathrm{mpg}_2}}\right)^2 \left(\frac{1}{\dfrac{S_1^2}{N_1 \times \overline{\mathrm{mpg}}_1^{\,4}} + \dfrac{S_2^2}{N_2 \times \overline{\mathrm{mpg}_2}^{\,4}}}\right)$$

---

[*] Extracted from Environmental Protection Agency Report No. EPA-460/2-74-001, Appendix III.[4]

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where

$$S_J^2 = \frac{1}{N_J - 1} \sum_{i=1}^{N_J} \left(\frac{1}{mpg_i} - \overline{mpg_J} \right)^2 \quad , \quad J = 1, 2$$

N_J = number of cars in Jth Subclass
$\overline{mpg_J}$ = $\overline{mpg}$ for Jth Subclass

Sales Weighted Fuel Economy

$$SWMPG = \frac{1}{\sum_{i=1}^{M} \frac{\omega_i}{N_i} \sum_{j=1}^{N_i} \frac{1}{mpg_{ij}}}$$

where

mpg_{ij} = fuel economy for the jth car in carline Class i
N_i = number of cars in Class i
ω_i = total sales of Class i cars relative to either a division or the entire fleet
M = number of classes in a division or the entire fleet
SWMPG = sales weighted harmonic mean fuel economy for a division or the entire fleet

NOTES

1. 1976 Commercial Atlas and Marketing Guide, 107th Edition, Rand McNally and Company, Chicago, Illinois (1976).

2. The National Atlas of the United States of America, U.S. Department of Interior Geological Survey, Washington, D.C. (1970).

3. Climatological Data, National Summary, Vol. 25 (1974) and Vol. 26 (1975), National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

4. M. E. Williams, J. T. White, L. A. Platte, and C. J. Domke, Automobile Exhaust Emission Surveillance — Analysis of the FY 72 Program, Appendix III, Environmental Protection Agency Report No. EPA-460/2-74-001 (February 1974).

GLOSSARY

AMPD	average miles per day
BBL	(number of carburetor barrels)
CID	(engine displacement)
EPA	Environmental Protection Agency
GM	General Motors (Corporation)
ID	identification
mpg	miles per gallon

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